



American Dynamics

From Tyco Security Products

VideoEdge Camera Handler

Release Notes

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American Dynamics

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What's New in This Release

Illustra iAPI3 5.0.100.18014

Added support for the following cameras:

Product code	Model	Description
IFS02P6INWIT	Illustra Flex 2MP Indoor IR PTZ	Illustra Flex 2MP PTZ, 30x, indoor, vandal, white, TDN w/IR, TWDR
IFS02P6ONWIT	Illustra Flex 2MP Outdoor IR PTZ	Illustra Flex 2MP PTZ, 30x, outdoor, vandal, white, TDN w/IR, TWDR

Audio/Video and Event Streaming Feature

Common characteristics:

The specific Auto/Video Stream feature characteristics by model families are:

Model Family	Audio/Video Stream Feature	Number of Inputs /Outputs
Illustra Flex IR PTZ	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	2/2

Edge Support

Model	Edge Motion Alarms	Edge Motion Metadata	Edge Face Alarms	Edge Face Metadata	Edge Blur Alarms
Illustra Flex IR PTZ	Yes	No	No	No	Yes

Limitations

- When resetting the PTZ database (do not select preserve preset, patterns and sequences) via factory reset or hard reset - if the camera is still connected to VENVR/victor, preset and patterns previously created will need to be removed and recreated on victor PTZ controller - editing existing slots will fail.
- If you remove and re-add the camera to the same NVR or a new NVR, the presets and patterns will need to be created again in victor client even if they are still present on camera GUI.

Illustra Essential 5.0.100.26006

Added support for the following cameras:

Product code	Model	Description
IES02D1OCWIYC	Illustra Essentials 2MP Dome 2.7-13.5mm	Illustra Essentials 2MP Dome, 2.7-13.5mm, outdoor, vandal, clear, white, TDN w/IR, WDR

Product code	Model	Description
IES02B1BNWIYC	Illustra Essentials 2MP Bullet 2.7-13.5mm	Illustra Essentials 2MP Bullet, 2.7-13.5mm, outdoor, nonvandal, white, TDN w/IR, WDR

Hanwha/Samsung 5.0.100.17006

Limitations

Model	Limitations	Work Around
XNB-6001, XNF-8010R & their respective families	After a network cable pull or if the camera is disconnected/powered down, Edge motion alerts may not work after the camera comes back online. No Edge motion alerts will be sent from the recorder to victor client. Reason: Camera limitation	Disable Edge Motion Detection on the VideoEdge and re-enable it.
XNF-8010R	There is a camera mount type option on VideoEdge that causes video loss when modified.	User must select the appropriate camera mount setting on the camera GUI before adding the camera to VideoEdge.

Pelco 5.0.100.20010

Supported Camera API & Models

Model	Minimum Camera Firmware Version
IXE32	0.6.3.0.5
IME329	0.6.3.0.5
S6230	2.11.0.7.9340-A0.0
IMM12036	2.11.0.7.8360-A0.0
NET5504	2.1.9.2

Special Points

Pelco camera web GUI does not use the Pelco API to set its values. This means that some settings will be different between the camera GUI and VideoEdge, especially when dealing with MJPEG.

Special Points

- [IXE32, IME329] Setting bitrate on these models will produce a result negated by 1 E.g Setting CBR = 9010kbps will save as 9009kbps.
Reason: Camera limitation.
- [IXE32, IME329] Camera configurations should be set-up properly on the camera GUI in order to retrieve Dry Contact alerts in VideoEdge. To enable this a user must set an alarm under Events > Sources and set-up a handler in Events > Handlers.

- 3 [IMM12036] This camera does not support MJPEG on VideoEdge due to a RTP header limitation, so it is recommended to add this camera without Smart Search
Reason: VideoEdge limitation
- 4 [IME329] MJPEG FPS value cannot be set through VideoEdge, this is a camera firmware problem
Reason: Camera limitation.
Work around: Change the MJPEG FPS value on the camera GUI

Hikvision 5.0.100.25004

Limitations

Model	Limitations	Work around
DS-2CD2H55FWD-IZS DS-2TD2136-15 DS-2CD2635FWD-IZS	While the maximum resolution is set, the cameras will experience FPS fluctuation and video skipping if the FPS is set to 20, or below 6. Reason: Camera Limitation	Set the FPS to a value between 8 and 20, or use a resolution below the highest.

Known Issues

Model	Known Issues	Work around
All models	Profile cannot be selected on the Functions & Streams page on the VideoEdge. Reason: VideoEdge Issue	Navigate to the camera web-page, under Configuration > Video/Audio. Select the required Profile from the Profile dropdown, and select Save.
All models	Adding a camera using HTTPS protocol. Due to a camera limitation, there is an extended delay when adding the cameras to VideoEdge when using HTTPS protocol. This will result in the camera not adding to VideoEdge. Reason: VideoEdge Issue	Add the camera with HTTP. Once added, navigate to Setup > General, and change the security group of the camera to a group with HTTPS enabled.
All models	When VBR is selected as the Bit Rate Control, the Bit Rate value cannot be saved. Reason: Camera Issue	To use VBR, navigate to the camera web-page, configuration > Video/Audio. Select the required Bit Rate in the Max Bitrate drop-down list, and select Save.

Illustra iAPI3 5.0.100.18006

Adding support for the following cameras:

Camera	Model	Firmware Version
IFS08D2ICWTT	Illustra Flex4K Indoor Mini-Dome	SS004.01.03.00.0704
IFS08D2OCWIT	Illustra Flex4K Outdoor Mini-Dome	SS004.01.03.00.0704
IFS08XNANWTT	Illustra Flex4K Indoor Box	SS004.01.03.00.0704
IPS02CFOCWST	Illustra Pro 2MP Compact	SS005.01.04.00.0037

Camera	Model	Firmware Version
IPS03CFOCWST	Illustra Pro 3MP Compact	SS005.01.04.00.0037
IFS02P6ONWIT ADCIPE3312ICPU	Illustra Flex2 Outdoor 2MP PTZ 30x	TBC
IFS02P6INWIT ADCIPE3312ISPU	Illustra Flex2 Indoor 2MP PTZ, 30x,	TBC

Audio/Video and Event Streaming Feature

Common characteristics:

The specific Auto/Video Stream feature characteristics by model families are:

Model Family	Audio/Video Stream Feature	Number of Inputs /Outputs
Illustra Flex 4K	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	1/1
Illustra Pro 2MP/3MP Compact	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	0/0

Edge Support

Model	Edge Motion Alarms	Edge Motion Metadata	Edge Face Alarms	Edge Face Metadata	Edge Blur Alarms
Illustra Flex 4K	Yes	Yes	No	No	Yes
Illustra Pro 2MP/3MP Compact	Yes	Yes	No	No	Yes

Limitations

- The camera will not support streaming dual MJPEG streams. The camera will either stream a H264, MJPEG dual stream combination or a single MJPEG or H264
- The Camera will offer clip recording/TrickleStor only on H264. No other coded ares supported at present

Known Issue

- Edge Analytics & Enhanced Security:When cameras are on Enhanced Security Edge Recording will not work unless Video over HTTP is enabled on camera GUI. Please check camera GUI, Flex2 Cameras will have automatically disabled Video over HTTP from FW 1.1 onwards when Enhanced Security is enabled.

Axis 5.0.100.2010

Limitations

All	Changing states of dry contacts inputs(s) does not affect the alerts received in victor. Both high and low state produce the same alert.
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Known Issues

All Axis cameras with VMD3 and VMD4	Axis cameras with firmware version 6.50.xx or above support VMD3 and VMD4. - If current app running is VMD4, this only supports motion alarms in VideoEdge integration without motion metadata. - If current running app is VMD3, this supports motion alarm and motion metadata in VideoEdge integration.
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FLIR 5.0.100.16016

FLIR New Camera Models Firmware

Introduced in the 5.0 version of Release Notes, FLIR now supports brand new series of cameras. Also additional information is given on firmware requirements for the new models of FLIR, introduced in 5.0.

5.0 FLIR Camera firmware compatibility	
Camera model	Firmware version
PT-602CZ	Nexus Server must be at least v2.5.32.0
PT-HD Series	Nexus Server must be at least v2.5.30.29
FC-ID Series	Nexus Server must be at least v2.5.29.12
A310pt	Nexus Server must be at least v2.5.29.3

Note:

Dual streams are supported by all models.

For PT-Series, F-Series, D Series & A310pt, only MJPEG can be used for second stream whether single or dual streaming

Known Issues

- Camera issue: Edge motion detection is not supported for FC-644-ID camera. It may trigger once when turned on, but no alerts will be received after the initial trigger. Seems to be an issue with the camera or the firmware version.
- When Zoom levels are set at minimum zoom for presets, switching between presets will not retain different zoom settings. Set up each preset with a minimum of +1 click zoom level across the presets.
- When FPS is set at 16 or above, the FPS will fluctuate based on the scene and environment for the FC-324-R camera. Set the FPS to max 15, to reduce FPS fluctuation. The stream will not keep a steady FPS even with low camera CPU usage.

Dahua 5.0.100.21006

Supported Key Functions

- Edge Device Face Detection

Supported Camera Firmware & Models

Model	Minimum Camera Firmware Version
IPC-HFW4231SP	2.460.0000000.16.R,build:2017-09-04
IPC-HDBW2421RP-ZS	2.620.0000002.0.R,build:2017-08-30
IPC-HFW5431EP-Z	2.460.0000000.16.R,build:2017-09-04
IPC-EBW81230P	2.600.0000.3.R,build:2017-08-30
SD5943OU-HNI	2.600.0000000.10.R,build:2017-09-06
NVS0104HDC	3.210.0001.6,build:2017-01-03

Limitations

Model	Limitations	Work Around
IPC-HFW4231SP IPC-HDBW2421RP-ZS IPC-HFW5431EP-Z IPC-EBW81230P SD5943OU-HNI NVS0104HDC	Camera model will display as Generic with the latest Dahua Handler.	Upgrade the Firmware to the Firmware versions listed in the Supported Camera Firmware & Models table.
All	Camera Firmware issue: All camera resolutions cannot be changed from the VideoEdge Admin webpage.	To change the resolution on the cameras, navigate to the camera webpage, select Camera > Video, and save the new resolution value. This will update the resolution on the VideoEdge Admin webpage.
	The cameras FPS on stream 1 cannot be less than stream 2. Reason: Camera Limitation	Set the FPS on stream 1 to a higher FPS value than what is set on Stream 2.

Arecont 5.0.100.8004

Required Network Ports

- Port 443 is for HTTPS

Limitations

- For models AV3356PMIR-SA and AV2355RS dry contacts are not supported.
- For AV08ZMV-300 Motion detection and Video intelligence are not supported, as the lowest resolution supplied by the camera is more than 1MP (1920x1080).

- Due to Arecont camera's firmware issue, HTTPS is not supported with AV2355RS. AV08ZMV-300 and AV08ZMD-400 do support streaming H264 with HTTPS.
- Camera Firmware limitation: For Arecont models AV08ZMxxx with firmware 1.9, MJPEG is disabled and is not supported on the camera. Therefore VideoEdge will not support MJPEG with camera firmware 1.9. Please reference the manufacturer Arecont camera release notes when an updated camera firmware will support MJPEG.
- AV2355RS: For FPS stability (due to the camera performance issue) we recommend the FPS setting of 12 FPS with VideoEdge. Any other FPS setting may result in large FPS fluctuations, especially when using FPS above 20 FPS.
- AV3356PMIR-SA: For FPS stability (due to the camera performance issue) we recommend the FPS setting of 7 FPS with VideoEdge. Any other FPS setting may result in large FPS fluctuations, especially when using FPS above 15 FPS.

Supported Resolutions

Model	Maximum Resolution	Resolution Options on VE NVR
AV08ZMD-400	3840 x 2160	3840 x 2160 & 1920 x 1080 (1920 x 1080 only for MJPEG)
AV08ZMV-300	3840 x 2160	3840 x 2160 & 1920 x 1080 (1920 x 1080 only for MJPEG)
AV3356PMIR-SA	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV2355RS	1920 x 1080	1920 x 1080 & 960 x 540

Illustra Essentials 5.0.100.26004

Illustra Essentials New Camera Models Firmware

Introduced in the 5.0 version of Release Notes, Illustra now supports 2 new cameras. Also additional information is given on firmware requirements for the new cameras, introduced in 5.0.

Model	Minimum Camera Firmware Version
IES02CFBCWIYB / IES02MFBNWIYB	ESSE7.01.01.00.0003

Bosch 5.0.100.13004

Limitations

For the Bosch 1-Channel Encoder - VIP-X1-XF-IVA, when using victor client for instant playback, the rewind button when clicked will show a frozen screen (due to large GOP sizes). Therefore to see video on instant playback, for rewind, you can use the jump back button and then play forward. Recorded video is not impacted. .

The following cameras are supported in VideoEdge:

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
Hanwha/Samsung						
Box Series Cameras						
XNB-6001	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNB-6005	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
Fixed Dome Series Cameras						
XND-6010	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XND-6011F	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XND-6085	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XND-6085V	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XND-8020F	H.264, MJPEG	Yes	0/0	No	MD/FD	4.8 - 5.0
XND-8030R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XND-8040R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNO-6020R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNO-6085R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNO-6120R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNO-8030R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNO-8040R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
SND-L5083R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
SNO-6085R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-6010	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-6011	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-6020R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-6085	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-6120	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-6120R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-8020R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-8030R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-8040R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
XNV-8080R	H.264, MJPEG	Yes	1/0	No	MD/FD	4.8 - 5.0
TNO-6320E	H.264, MJPEG	No	1/0	No	MD/FD	4.8 - 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
TNU-6320E	H.264, MJPEG	No	1/0	No	MD/FD	4.8 - 5.0
PTZ Series Cameras						
XNP-6040H	H.264, MJPEG	Yes	1/0	Yes	MD/FD	4.8 - 5.0
XNP-6120H	H.264, MJPEG	Yes	1/0	Yes	MD/FD	4.8 - 5.0
XNP-6320	H.264, MJPEG	Yes	1/0	Yes	MD/FD	4.8 - 5.0
XNP-6320H	H.264, MJPEG	Yes	1/0	Yes	MD/FD	4.8 - 5.0
XNP-6320HS	H.264, MJPEG	Yes	1/0	Yes	MD/FD	4.8 - 5.0
Fish eye Cameras						
XNF-8010R	H.264, MJPEG	Yes	1/0	No	MD	4.8 - 5.0
XNF-8010RV	H.264, MJPEG	Yes	1/0	No	MD	4.8 - 5.0
XNF-8010RVM	H.264, MJPEG	Yes	1/0	No	MD	4.8 - 5.0
XNF-8010RV_RVM	H.264, MJPEG	Yes	1/0	No	MD	4.8 - 5.0
L-series Cameras						
LND-6010R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LND-6020R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LND-6030R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LND-6070R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LNO-6010R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LNO-6020R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LNO-6030R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LNO-6070R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LNV-6010R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LNV-6020R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LNV-6030R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
LNV-6070R	H.264, MJPEG	Yes	0/0	No	MD	4.8 - 5.0
Multi-channel Cameras						
PNM-7000VD	H.264, MJPEG	No	0/0	No	MD	4.8 - 5.0
PNM-9080VQ	H.264, MJPEG	No	0/0	No	MD	4.8 - 5.0
PNM-9081VQ	H.264, MJPEG	No	0/0	No	MD	4.8 - 5.0
Pelco						

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
Box						
IXE12	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXE22	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXE32	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXES1	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXE11	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXE21	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXE31	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXPS1	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXP11	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXP21	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXP31	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IXP51	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
Bullet						
IBPS110	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IBP1110	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IBP219	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IBP319	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IBP519	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IBE129	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IBE229	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IBE329	H264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
VR Dome						
IWP121	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IWP221	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
Micro Dome						
IJP121	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IJP221	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
Ruggedized						
EXF1230	H.264, MJPEG	No	4/0	No	Yes	4.8 – 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
Mini						
IMP121	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMP221	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMP321	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMP521	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMPS110	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMP1110	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMP219	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMP319	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMP519	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IME129	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IME229	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IME329	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMES19	H.264, MJPEG	Yes	1/0	No	No	4.8 – 5.0
IME119	H.264, MJPEG	Yes	1/0	No	No	4.8 – 5.0
IME219	H.264, MJPEG	Yes	1/0	No	No	4.8 – 5.0
IME319	H.264, MJPEG	Yes	1/0	No	No	4.8 – 5.0
IME3122	H.264, MJPEG	Yes	1/0	No	No	4.8 – 5.0
PTZ						
S6220	H.264, MJPEG	Yes	1/0	Yes	Yes	4.8 – 5.0
S6230	H.264, MJPEG	Yes	1/0	Yes	Yes	4.8 – 5.0
S6220L	H.264, MJPEG	Yes	1/0	Yes	Yes	4.8 – 5.0
S6230L	H.264, MJPEG	Yes	1/0	Yes	Yes	4.8 – 5.0
S6220-US	H.264, MJPEG	Yes	1/0	Yes	Yes	4.8 – 5.0
S6230-US	H.264, MJPEG	Yes	1/0	Yes	Yes	4.8 – 5.0
P1220	H.264, MJPEG	Yes	4/0	Yes	Yes	4.8 – 5.0
ES523L	H.264, MJPEG	No	0/0	Yes	Yes	4.8 – 5.0
ES5230	H.264, MJPEG	No	0/0	Yes	Yes	4.8 – 5.0
EXP1230	H.264, MJPEG	No	4/0	Yes	Yes	4.8 – 5.0
Panoramic (Multi Sensor Cameras)						

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
IMM12018	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMM12027	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
IMM12036	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
Encoder						
NET5404T	H.264, MJPEG	No	DPC*	Yes	Yes	4.8 – 5.0
NET5501	H.264, MJPEG	No	0/0	No	Yes	4.8 – 5.0
NET5501-I	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
NET5501-XT	H.264, MJPEG	Yes	1/0	No	Yes	4.8 – 5.0
NET5504	H.264, MJPEG	Yes	4/0	No	Yes	4.8 – 5.0
NET5508	H.264, MJPEG	Yes	8/0	No	Yes	4.8 – 5.0
NET5516	H.264, MJPEG	Yes	16/0	No	Yes	4.8 – 5.0
NET5516T	H.264, MJPEG	Yes	16/0	No	Yes	4.8 – 5.0
Hikvision						
Fixed Cameras						
DS-2CD2H55FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2025FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2035FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2055FWD-I	H264, MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2085FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2025FHWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2125FWD-I (S) [2]	H264, MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2125FWD-IM	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2135FWD-I (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2155FWD-I (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2185FWD-I	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2125FHWD-I (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2325FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
DS-2CD2335FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2355FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2385FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2325FHWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2T25FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2T35FWD-I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2T55FWD-I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2T85FWD-I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2T25FHWD-I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2625FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2635FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2655FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2685FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2725FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2735FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2755FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2785FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2H25FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2H35FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2H85FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2935FWD-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2955FWD-I	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
(S) [2]						
DS-2CD2023G0-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2043G0-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2123G0-I (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2143G0-I (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2323G0-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2343G0-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2623G0- IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2643G0- IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2723G0- IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2743G0- IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2H23G0- IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2H43G0- IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2622FWD- IZS	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0
DS-2CD2622FWD-I (S)(Z) [2]	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0
DS-2CD2F22FWD-I (W)(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2F42FWD-I (W)(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2F52F-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2T22WD- I3/I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2T42WD- I3/I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2T52- I3/I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2022WD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2042WD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
DS-2CD2052-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2122FWD-I (W)(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2142FWD-I (W)(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2152F-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2322WD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2342WD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2352-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD2422FWD-IW	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2442FWD-IW	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2452F-IW	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2522FWD-I (W)(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2542FWD-I (W)(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2552F-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2642FWD-I (S)(Z) [2]	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0
DS-2CD2652F-I(S) (Z) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2722FWD-I (S)(Z) [2]	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0
DS-2CD2742FWD-I (S)(Z) [2]	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0
DS-2CD2752F-I(S) (Z) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD2412FWD-IW	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD6414FWD-10/20/30	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2CD6424FWD-10/20/30	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2XM6612(D) FWD-I	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
DS-2XM6622(D) FWD-I	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0
DS-2CD1031-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1041-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1131-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1141-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1331-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1341-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1631FWD-I (Z)	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1641FWD-I (Z)	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1731FWD-I (Z)	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1741FWD-I (Z)	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1H31WD-IZ	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
DS-2CD1H41WD-IZ	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0
Thermal Camera						
DS-2TD2136T-15	H264,MJPEG	Yes	2/2	No	Yes	4.8 – 5.0
DS-2TD2136(T)	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0
DS-2TD2166(T)	H.264,MJPEG, MPEG4	Yes	2/2	No	Yes	4.8 – 5.0
DS-2TD2336	H264,MJPEG	Yes	2/2	No	Yes	4.8 – 5.0
DS-2TD2366	H264,MJPEG	Yes	2/2	No	Yes	4.8 – 5.0
DS-2TD4136	H.264,MJPEG, MPEG4	Yes	7/2	Yes	Yes	4.8 – 5.0
DS-2TD4166	H.264,MJPEG, MPEG4	Yes	7/2	Yes	Yes	4.8 – 5.0
People Counting Camera						
iDS-2CD6810F/C	H264	No	1/1	No	No	4.8 – 5.0
iDS-2CD6810F-IV/C	H264	No	1/1	No	No	4.8 – 5.0
Illustra iAPI3						
Illustra Flex IR PTZ Series						

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
IFS02P6ONWIT	H.264, MJPEG	Yes	2/2	Yes	Yes	4.8 - 5.0.0
IFS02P6INWIT	H.264, MJPEG	Yes	2/2	Yes	Yes	4.8 - 5.0.0
Illustra Flex 4K Series Domes						
IFS08D2ICWTT	H.264, MJPEG	Yes	1/1	No	Yes	4.8 - 5.0.0
IFS08D2OCWIT	H.264, MJPEG	Yes	1/1	No	Yes	4.8 - 5.0.0
Illustra Flex 4K Series Box						
IFS08XNANWTT	H.264, MJPEG	Yes	1/1	No	Yes	4.8 - 5.0.0
Illustra Pro Compact						
IPS02CFOCWST	H.264, MJPEG	No	0/0	No	Yes	4.8 - 5.0.0
IPS03CFOCWST	H.264, MJPEG	No	0/0	No	Yes	4.8 - 5.0.0
AXIS						
Encoders						
P7224 Blade	H264, MJPEG	Yes	2/0	Yes	Yes	4.4 - 5.0.0
Q7414 Blade	H264, MJPEG	Yes	2/0	Yes	Yes	5.0.0
Q7424-R Mk II	H264, MJPEG	Yes	2/0	Yes	Yes	4.8.1 - 5.0.0
Q7436 Blade	H264, MJPEG	No	2/0	Yes	Yes	4.8.1 - 5.0.0
Fixed Cameras						
P1365 Mk II	H.264, MJPEG	Yes	1/0	No	Yes	4.8.1 - 5.0.0
P1365-E Mk II	H.264, MJPEG	Yes	1/0	No	Yes	4.8.1 - 5.0.0
P1428-E	H.264, MJPEG	No	1/0	No	Yes	4.8.1 - 5.0.0
M1045-LW	H.264, MJPEG	Yes	0/0	No	Yes	5.0.0
M1065-L	H.264, MJPEG	Yes	0/0	No	Yes	5.0.0
M1065-LW	H.264, MJPEG	Yes	0/0	No	Yes	5.0.0
M2025-LE	H.264, MJPEG	No	0/0	No	Yes	5.0.0
M2026-LE	H.264, MJPEG	No	0/0	No	Yes	5.0.0
M2026-LE Mk II	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P1254	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P1245	H.264, MJPEG	No	0/0	No	Yes	4.4 - 5.0.0
P1264	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P1367	H.264, MJPEG	Yes	2/0	No	Yes	5.0.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
P1405-LE Mk II	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P1425-LE Mk II	H.264, MJPEG	No	1/0	No	Yes	5.0.0
Q1615 Mk II	H.264, MJPEG	Yes	2/0	No	Yes	5.0.0
Q1615-E Mk II	H.264, MJPEG	Yes	2/0	No	Yes	5.0.0
Q1659	H.264, MJPEG	Yes	2/0	No	Yes	5.0.0
Fixed Dome Cameras						
Q3709-PVE	H.264, MJPEG	No	0/0	No	Yes	4.4 - 5.0.0
M3044-WV	H264, MJPEG	No	0/0	No	Yes	5.0.0
M3045-WV	H264, MJPEG	No	0/0	No	Yes	5.0.0
M3047-P	H264, MJPEG	No	0/0	No	Yes	5.0.0
M3048-P	H264, MJPEG	No	0/0	No	Yes	5.0.0
M3104-L	H264, MJPEG	No	0/0	No	Yes	5.0.0
M3104-LVE	H264, MJPEG	No	0/0	No	Yes	5.0.0
M3105-L	H264, MJPEG	No	0/0	No	Yes	5.0.0
M3105-LVE	H264, MJPEG	No	0/0	No	Yes	5.0.0
M3106-L MKII	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3224-LV Mk II	H.264, MJPEG	Yes	0/0	No	Yes	5.0.0
P3224-V Mk II	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3225-LV Mk II	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3225-LVE Mk II	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3225-V Mk II	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3225-VE Mk II	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3227-LV	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3227-LVE	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3228-LV	H.264, MJPEG	No	0/0	No	Yes	5.0.0
P3228-LVE	H.264, MJPEG	No	0/0	No	Yes	5.0.0
Covert cameras						
FA54	H.264, MJPEG	Yes	4/0	No	Yes	5.0.0
PTZ Dome Cameras						
Q6045 Mk II	H.264, MJPEG	No	0/0	Yes	Yes	4.8.1 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
Q6045-C Mk II	H.264, MJPEG	No	0/0	Yes	Yes	4.8.1 - 5.0.0
Q6045-E Mk II	H.264, MJPEG	No	0/0	Yes	Yes	4.8.1 - 5.0.0
Q6045-S Mk II	H.264, MJPEG	No	0/0	Yes	Yes	4.8.1 - 5.0.0
P5635 MK II	H.264, MJPEG	Yes	4/0	Yes	Yes	4.8.1 - 5.0.0
P5624-E Mk II	H.264, MJPEG	No	0/0	Yes	Yes	5.0.0
M5525-E	H.264, MJPEG	Yes	4/0	Yes	Yes	5.0.0
P5635-E Mk II	H.264, MJPEG	Yes	4/0	Yes	Yes	5.0.0
Q6000-E Mk II	H.264, MJPEG	No	0/0	Yes	Yes	5.0.0
Q6052	H.264, MJPEG	Yes	4/0	Yes	Yes	5.0.0
Q6052-E	H.264, MJPEG	No	0/0	Yes	Yes	5.0.0
Q6054 Mk II	H.264, MJPEG	Yes	4/0	Yes	Yes	5.0.0
Q6054-E Mk II	H.264, MJPEG	No	0/0	Yes	Yes	5.0.0
Q6055	H.264, MJPEG	Yes	4/0	Yes	Yes	5.0.0
Q6055-E	H.264, MJPEG	No	0/0	Yes	Yes	5.0.0
Q6055-C	H.264, MJPEG	No	0/0	Yes	Yes	5.0.0
Q6055-S	H.264, MJPEG	No	0/0	Yes	Yes	5.0.0
Q6124-E	H.264, MJPEG	No	0/0	Yes	Yes	5.0.0
Q8741-E	H.264, MJPEG	No	4/0	Yes	Yes	5.0.0
Q8742-E	H.264, MJPEG	No	4/0	Yes	Yes	5.0.0
Thermal Cameras						
Q1941-E PT Mount	H.264, MJPEG	No	0/0	No	Yes	5.0.0
Q1942-E	H.264, MJPEG	Yes	2/0	No	Yes	5.0.0
Q1942-E PT Mount	H.264, MJPEG	Yes	2/0	No	Yes	5.0.0
Q2901-E PT Mount	H.264	No	0/0	No	Yes	5.0.0
Explosion-Protected						
XF40-Q1765	H.264, MJPEG	No	0/0	No	Yes	5.0.0
XP40-Q1765	H.264, MJPEG	No	0/0	No	Yes	5.0.0
Network door stations						
A8004-VE	H.264, MJPEG	Yes	4/0	Yes	Yes	5.0.0
A8105-E	H.264, MJPEG	Yes	4/0	Yes	Yes	5.0.0
Dahua						

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
Fixed Box & Bullet						
IPC-HF81230E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HFW81230E-Z	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HF8630F	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HF8331E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HF8232F	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HF8231E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HFW8630E-Z	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HFW8331E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
IPC-HFW8232E-Z	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HFW8231E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
IPC-HF5431E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HF5231E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HFW5830E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
IPC-HFW5431E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
IPC-HFW5231E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
IPC-HDW5830R-Z	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0
IPC-HDW5431R-Z	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0
IPC-HDW5231R-Z	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0
IPC-HFW4830E-S	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW4431E-S	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW4231E-S	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW4431S	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW4231S	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW4431B-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HFW4231B-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HFW4431D-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HFW4231D-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HDW4830EM-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0
IPC-HDW4431EM-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
IPC-HDW4231EM-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0
IPC-HDW4431M	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HDW4231M	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW2421R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW2421R-ZS-IRE6	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HFW2320R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW2320R-ZS-IRE6	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HFW2221R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW2221R-ZS-IRE6	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HFW2121R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW2121R-ZS-IRE6	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HDW2421R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HDW2320R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HDW2221R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HDW2121R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HFW1420S	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW1320S	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW1220S	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HFW1120S	H264,MJPEG	No	0/0	Yes	No	5.0.0
Dome						
IPC-HDBW81230E-Z	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-HDBW8630E-Z	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HDBW8331E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
IPC-HDBW8232E-Z	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HDBW8231E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0
IPC-HDBW5830E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0
IPC-HDBW5431E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0
IPC-HDBW5231E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0
IPC-HDBW5830R-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0
IPC-HDBW5431R-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0
IPC-HDBW5231R-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0
IPC-HDBW4830E-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HDBW4431E-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HDBW4231E-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-HDBW4431F-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0
IPC-HDBW4231F-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0
IPC-HDB4431C-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0
IPC-HDB4231C-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0
IPC-HDBW2421R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HDBW2421R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HDBW2320R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HDBW2320R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HDBW2221R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HDBW2221R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
IPC-HDBW2121R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HDBW2121R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
IPC-HDBW1420E	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HDBW1320E	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HDBW1220E	H264,MJPEG	No	0/0	Yes	No	5.0.0
IPC-HDBW1120E	H264,MJPEG	No	0/0	Yes	No	5.0.0
PTZ						
SD6AE830V-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD6AL830V-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD6AE230F-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD6AL230F-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD65F230F-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD6AE240V-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD6C230U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD60230U-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD60225U-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD60131U-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD60230U-HNI-SL	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD59230U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD59225U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD59131U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD50230U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD50225U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD50131U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD52C230U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD52C225U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD52C131U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD6C430U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD60430U-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
SD59430U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD50430U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD52C430U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD49225T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
SD49220T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD49212T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD40212T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD42212T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD42C212T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0
SD29204T-GN	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0
SD22204T-GN	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
SD22204T-GN-W	H264,MJPEG	No	0/0	Yes	Yes	5.0.0
SD29204T-GN-W	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0
PTZ12230F-IRB-N	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
PTZ12240-IRB-N	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
PTZ12230F-LR8-N	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
PTZ12240-LR8-N	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0
Panoramic						
IPC-EBW81230P	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-PFW8601-A180	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-EBW81200	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-EBW8600	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-EBW8600-IVC	H264,MJPEG	Yes	2/0	Yes	No	5.0.0
IPC-EB5500	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
IPC-EB5400	H264,MJPEG	Yes	1/0	Yes	No	5.0.0
Encoder						
NVS0104HDC	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0
NVS0204HDC	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0
NVS0404HDC	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0
NVS0404HDC-A-F	H264,MJPEG	Yes	8/0	Yes	Yes	5.0.0
NVS0804HDC-A-F	H264,MJPEG	Yes	8/0	Yes	Yes	5.0.0
NVS1604HF-A-E	H264,MJPEG	Yes	16/0	Yes	Yes	5.0.0
NVS0804HF-A-E	H264,MJPEG	Yes	16/0	Yes	Yes	5.0.0
NVS0404HF-A-E	H264,MJPEG	Yes	16/0	Yes	Yes	5.0.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
NVS0404HE-AS	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0
NVS0204HE-AS	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0
NVS0104HE-AS	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0
NVS1604HDC-A	H264,MJPEG	Yes	16/0	Yes	Yes	5.0.0
NVS0804HDC-A	H264,MJPEG	Yes	8/0	Yes	Yes	5.0.0
NVS0404HDC-A	H264,MJPEG	Yes	8/0	Yes	Yes	5.0.0
Arecont						
Fixed Cameras						
AV08ZMV-300	H.264, MJPEG	No	1/0	No	Yes	5.0.0
MegaDome Dome Cameras						
AV08ZMD-400	H.264, MJPEG	No	1/0	No	Yes	5.0.0
AV3356PMIR-SA	H.264, MJPEG	Yes	0/0	No	Yes	5.0.0
AV2355RS	H.264, MJPEG	No	0/0	No	Yes	5.0.0
Bosch						
Encoder						
VIP X1 XF Series	H.264, MJPEG	Yes	2/0	Yes	Yes	5.0.0
FLIR						
Multi-Sensor Pan Tilt Cameras						
PT-644 HD	H.264, MJPEG	No	0/0	Yes	No	5.0.0
PT-625 HD	H.264, MJPEG	No	0/0	Yes	No	5.0.0
PT-617 HD	H.264, MJPEG	No	0/0	Yes	No	5.0.0
PT-612 HD	H.264, MJPEG	No	0/0	Yes	No	5.0.0
PT-608 HD	H.264, MJPEG	No	0/0	Yes	No	5.0.0
PT-606Z HD	H.264, MJPEG	No	0/0	Yes	No	5.0.0
PT-602CZ	H.264, MJPEG	No	0/0	Yes	No	5.0.0
A310pt	H.264, MJPEG, MPEG4	No	0/0	Yes	Yes	5.0.0
Thermal Cameras						
FC-304 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-305 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Supported	VideoEdge Versions Supported
FC-309 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-313 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-317 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-324 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-332 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-344 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-371 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-608 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-610 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-617 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-625 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-632 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-644 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-669 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
FC-690 ID	H.264, MJPEG, MPEG4	No	1/0	No	Yes	5.0.0
Illustra Essentials						
Fixed Cameras						
IES02CFBCWIYB	H.264, MJPEG	No	0/0	No	Yes	4.8.1 - 5.0.0
IES02MFBNWIYB	H.264, MJPEG	No	0/0	No	Yes	4.8.1 - 5.0.0

General Purpose

The purpose of this document is to provide a detailed list of supported manufacturers and manufacturers' camera lines integrated and supported by the American Dynamics VideoEdge Network Video Recorder version 5.0 and the VideoEdge Camera Handler version 5.0

Cameras and Encoders supported and available with current version 5.0:

- American Dynamics & Illustra
 - American Dynamics Eight Channel Encoder
 - American Dynamics Fixed IP
 - American Dynamics IP SpeedDome Cameras
 - Illustra 210 Series
 - Illustra 400 Series
 - Illustra 600/600LT/610/610LT Series
 - Illustra Pro Mini-Dome Series
 - Illustra Essentials Series
 - Illustra 625 PTZ Cameras
 - Illustra 600/610 Compact Mini-Dome
 - Illustra 610 Compact Mini-Bullet
 - Illustra 825 Fisheye
 - Illustra Flex Series
 - Illustra Flex PTZ
 - Illustra Pro 12MP FE
- ACTi Corporation Cameras
- Arecont Vision Cameras
- AXIS Cameras and Encoders
- Bosch Cameras
- CBC Cameras
- Dahua Cameras
- exacqVision Encoders
- FLIR
- Hikvision
- ONVIF
- Panasonic Encoders and Cameras
- Pelco
- Samsung Encoders and Cameras
- SONY Encoders and Cameras
- Vivotek Encoders and Cameras

Note:

- You can upgrade your VideoEdge Camera Handler version at <http://www.americandynamics.net>
 - Refer to the VideoEdge Installation and User Guide to configure storage. VideoEdges can require a tremendous amount of storage space depending on the number of cameras, codec, resolution, and frame rates, recording modes, and the duration for which you wish to preserve video recordings. At the outset of your use of the VideoEdge system, you will need to have storage configured to record data
-

American Dynamics Fixed Camera (Illustra 210, Illustra 600 and Illustra 610 Domes)

Gaming Mode

Firmware 17-19 contains a New Feature – Gaming Mode.

This can be enabled on the camera Web GUI and will lock the settings of Stream 1 to H264, 30fps.

For further information refer to the camera manual.

If Gaming Mode is enabled on the Camera GUI, the following limitations apply to the NVR:

- Gaming Mode locks Stream 1 to 30 fps, so any fps changes on the NVR will fail. The NVR Stream Settings may show the new value, but refreshing the page will show the correct value of 30 fps again.
- Gaming Mode locks Stream 1 to H264, but a user can still set both streams to MJPEG on the NVR. The result is that the camera will not stream. Workaround - Change Stream 1 back to H264 on the NVR.
- The Illustra 600 primary and secondary streams configuration do not necessarily reflect stream one and stream two on the NVR. The camera only identifies the streams by the stream codec (ignoring FPS and resolution.) If the Camera is already on the NVR and then Gaming Mode is enabled, the camera may stop streaming due to a settings conflict. It may be necessary to remove the camera from the NVR and re-add it after enabling Gaming Mode. Alternatively, enable Gaming Mode on the camera before adding it to the NVR.

Gaming Mode can now be enabled on the NVR Web GUI 4.7 and above and should follow the following rule

- You should not change the Codec of the camera when Gaming mode is enabled on the VideoEdge. If you need to change the Codec, Gaming mode should be disabled first, For Gaming mode functionality please refer to the cameras-specific user manual.

Auto Discovery

The Auto-Discovery feature allows you to automatically discover 'discoverable devices' on the network to add to the VideoEdge NVR. Multiple devices can be added to the VideoEdge NVR until you reach your limit of camera license. The default recording status for cameras added via auto-discovery is Record Always. Once the devices are discovered the user has the choice of updating the device name. This update is applied when the camera is added to the VideoEdge NVR.

The new auto discovery feature now allows cameras to be discovered on the network faster and with fewer steps. This feature uses standard network discovery protocols that simplify the setup of cameras on the VideoEdge NVR. All AD cameras and Axis cameras can use this feature. Other camera manufactures may not support these standard discovery protocols. For those cameras, the existing VideoEdge NVR 4.4 discovery functionality (ScanDevices) has been included within the VideoEdge NVR.

When using Auto-Discovery, it is recommended that the VideoEdge NVR you are using to discover cameras on is on the same subnet as the cameras.

Note:

Not all cameras can be added to the VideoEdge NVR in this way as some manufacturers require cameras to be pre-configured prior to being added to network i.e. cameras which communicate through ONVIF

The user can now update the camera IP address. This is done through the 'Discovered cameras list' by the user enabling the checkbox beside the relevant camera and clicking on the 'IP' button. The user can then configure the IP either by using DHCP or specifying an IP address.

For Auto Discovery IP Change Feature, it is only supported for American Dynamics Cameras. Known issues/limitations for this feature are for the following models:

- ADCi600-W012
- American Dynamics 8 channel IP Encoder
- Illustra 625 PTZ.

All non American Dynamics Cameras do not support this feature.

Discovered devices can now also be added to a security group. This is done by the user unchecking the Default associations radio button and selecting a predefined security group from the security group dropdown. New security groups can be created via the security tab. Please refer to security for more information.

- Please be aware that if camera auto discovery is turned off then the NVR auto discovery is also turned off.

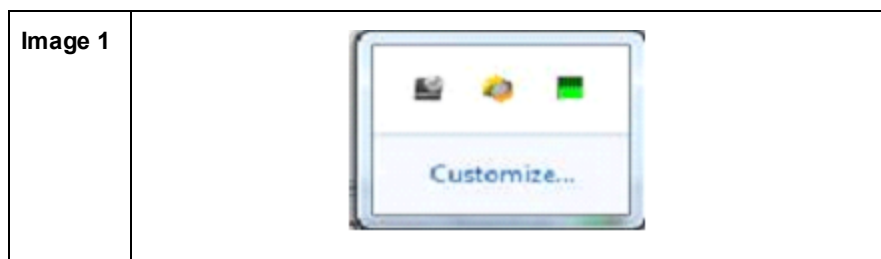
Push Updates

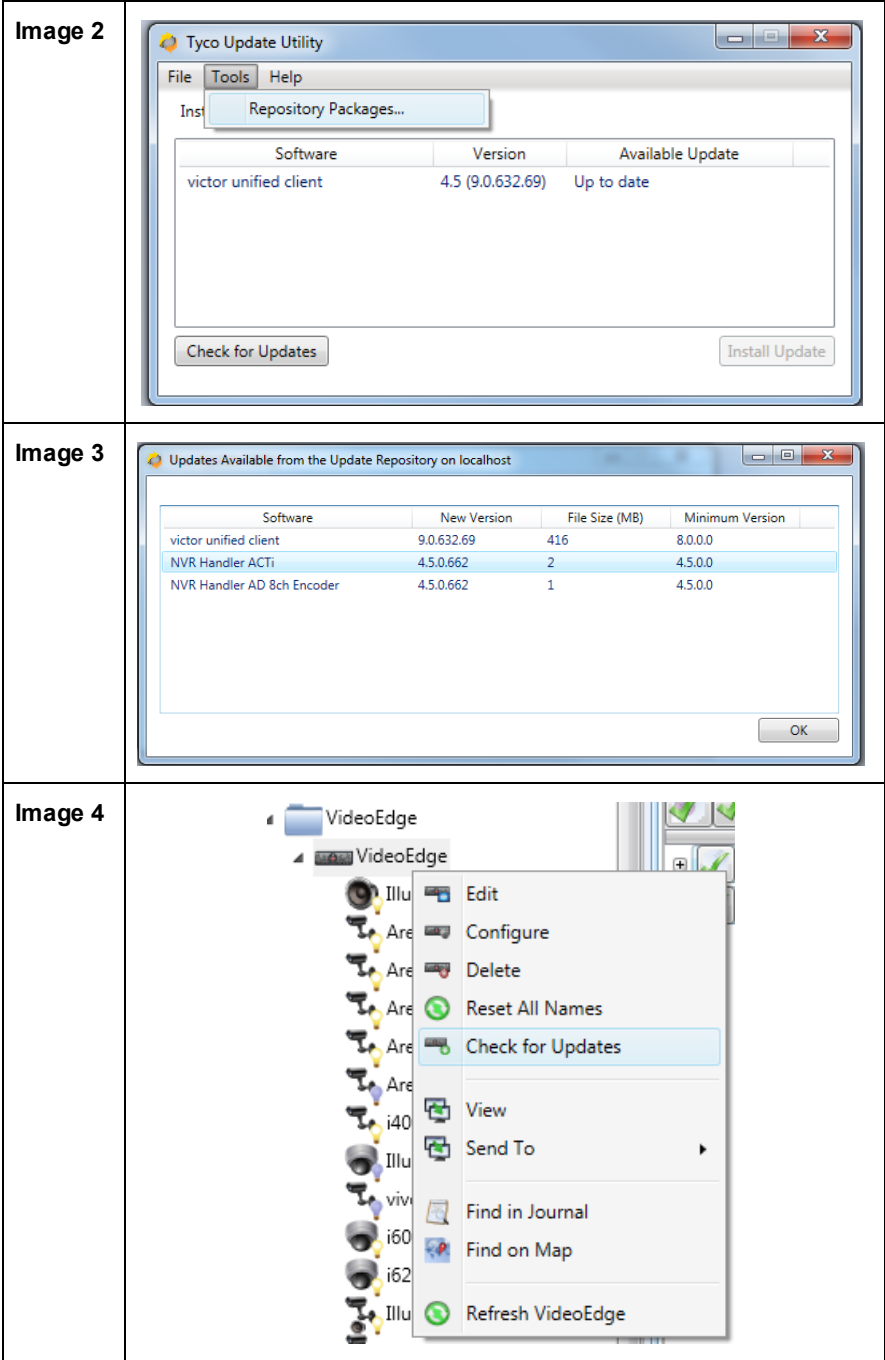
With VideoEdge NVR 4.4 onwards, the ability was added through victor VE client to perform push upgrades of VideoEdge NVR software via the victor client. This functionality has been enhanced in VideoEdge NVR version 4.5 to include individual camera handler push updates going forward.

To Update Individual Camera Handlers the Handler.exe package must be downloaded and placed in a folder named "Repository" inside the Tyco\Update Server repository directory on the Site Manager's workstation. It may be necessary to create the Repository folder if it does not already exist.

The camera handler executables will require to be extracted (double click to execute) prior to making them available for installation.

The installation process can be initialized either by running the "Tyco Update Utility tool" located in the System tray (Image 1) and selecting "Tools\Repository packages (image 2 and 3) or alternatively the user can choose to right-click the VideoEdge NVR Icon in the "Victor Client Device list" and select "Check for Updates" (image 4).





The Tyco update Utility will provide choice of which handler to select and install while the check for updates option will install all available handlers located in the Repository folder.

The update process will stop and restart services as each individual handler is installed. Update process can be monitored through the Victor Client “Activity Window” or from the

“System\Update Software” page of the VideoEdge NVR. The information under “Upload packages” will change as each package completes, retaining the last package uploaded information. As each handler is installed successfully the Device handler version number for the device selected to update will change to reflect the update.

Security Hardening - HTTPS

VideoEdge NVR 4.5 onwards supports HTTPS connection with various brand of cameras.

Users can configure 3 Security Groups in the Security page under Devices tab to the following security groups - Low (HTTP/Basic), Medium(HTTP/Digest) or High(HTTPS/SSLv3). The security group can also be kept as Default which will allow the camera handler to decide which authentication to use.

Once these Security Groups are configured, the user has the option to choose the level of security (if supported)they prefer when adding their camera to the VideoEdge NVR or VE Hybrid and it should be noted that user will need to enable the HTTPS feature on their camera before adding to VideoEdge NVR or VE Hybrid.

Table below shows the Security Group which each handler supports:

Handlers	Low (HTTP/Basic) or Default	Medium (HTTP/Digest)	High (HTTPS/SSLv3)
AD 8 Channel Encoder	Yes	No	No
AD VideoEdge IP Cameras	Yes	No	No
AD Illustra iAPI1	Yes	No	Yes
AD IP SpeedDomes	N/A	N/A	N/A
AD Illustra iAPI2	Yes	No	Yes
Illustra iAPI3	Yes	Yes	Yes
Illustra Flex	Yes	No	No
Illustra Essentials	Yes	No	No
ACTi Corporation Cameras	Yes	No	No
Axis Cameras	DPC*	DPC*	DPC*
Arecont Vision Cameras	Yes	No	No
Arecont Vision- CBC	Yes	No	No
Bosch Cameras	Yes	No	No
Dahua Cameras	Yes	No	No
exacqVision	Yes	No	Yes
Flir	Yes	No	No
Hikvision	Yes	No	DPC*
Panasonic Cameras	Yes	No	No
Pelco Cameras	Yes	No	No
Samsung Cameras	Yes	No	No
Sony Cameras	Yes	No	Yes
Vivotek Cameras	Yes	No	Yes

* DPC - depends on camera capability

Bit Rate Controls on Supported Cameras for H.264 and MPEG4

Video stream configuration for supported cameras now has the ability to select a bitrate control for H.264 and MPEG4. Depending on the camera, bit rate control can be either variable bit rate, constrained bit rate, constant bit rate or constant quality.

ONVIF Camera Handler

An ONVIF compliant camera handler has been added to the VideoEdge so that ONVIF ProfilesS (v2.2) compliant cameras can be added to the system.

VideoEdge NVR GUI Device Handler Name Mapping for Camera Model Support

	VideoEdge NVR GUI Device Handler Name	Camera Model Support	Handler Version
1	AD 8 Channel Encoder	AD 8 Channel Encoder	5.0.0.862
2	AD VideoEdge IP Camera	AD Fixed	5.0.0.862
3	AD Illustra iAPI1	Illustra 400 Illustra 600C Box Illustra 600/610/LT Box/Bullet	5.0.0.862
4	AD IP SpeedDome	IP SpeedDome	5.0.0.862
5	AD Illustra iAPI2	Illustra 600/610/LT Dome Illustra 210 Dome	5.0.0.862
6	AD 1 Channel Encoder CN	ADSTE	5.0.0.862
7	Illustra iAPI3	Illustra 625 PTZ / Pro PTZ Illustra 600 Compact Mini Dome Illustra 610 Compact Mini-Bullet Illustra Pro LT Bullet Illustra Pro 2MP Micro Illustra 825 Fisheye Illustra Pro Minidomes Illustra Pro compact Illustra Flex 3MP & 4K	5.0.100.18012
8	Illustra Flex	Illustra i600F - W012 Illustra i600F - X002/B521/D021/D111 Illustra i800F - X002/B521/D021/D111	5.0.0.862
9	Illustra Essentials	Illustra Essentials	5.0.100.26006
10	ONVIF	ONVIF	5.0.0.862
11	ACTI	ACTI	5.0.0.862
12	AXIS	AXIS	5.0.100.2010
13	Arecont Vision	Arecont	5.0.100.8004

	VideoEdge NVR GUI Device Handler Name	Camera Model Support	Handler Version
14	Arecont Vision	CBC	5.0.0.862
15	Bosch	Bosch	5.0.100.13004
16	Dahua	Dahua	5.0.100.21006
17	exacqVision	exacqVision	5.0.0.862
18	FLIR	FLIR	5.0.100.16016
19	Hikvision	Hikvision	5.0.100.25004
20	Panasonic	Panasonic	5.0.0.862
21	Pelco	Pelco	5.0.100.20006
22	SONY	SONY	5.0.0.862
23	Samsung	Samsung	5.0.100.17012
24	Vivotek	Vivotek	5.0.0.862

At any given time there may be more than one camera pack available for the VideoEdge NVR. This camera pack provides full support to all existing (updates and add-ons) and new cameras available for the VideoEdge NVR. The following is a list of all existing manufacturers and cameras supported by the VideoEdge NVR:

- American Dynamics and Illustra
 - American Dynamics Eight Channel Encoder
 - American Dynamics Fixed IP
 - Illustra 210 Series
 - Illustra 400 Series
 - Illustra 600/600LT/610/610LT Series
 - Illustra Pro Mini-Dome Series
 - Illustra Essentials Series
 - American Dynamics IP SpeedDome Cameras
 - Illustra 600/610 Compact Mini-Dome Series
 - Illustra 625 PTZ Cameras / Pro PTZ Cameras
 - Illustra 600/610 Compact Mini-Dome
 - Illustra 610 Compact Mini-Bullet
 - Illustra LT Bullet Camera
 - Illustra 2MP Micro Cameras
 - Illustra 825 Fisheye
 - Illustra Flex Series
 - Illustra Flex PTZ
 - Illustra Pro 12MP FE
 - Illustra Essentials Series
 - Illustra Pro Minidome Series
- ACTi Corporation Cameras
- Arecont Vision Cameras
- AXIS Cameras and Encoders
- Bosch Cameras
- CBC Cameras
- Dahua Cameras
- exacqVision
- FLIR
- Hikvision
- ONVIF
- Panasonic Encoders and Cameras
- Pelco
- Samsung Encoders and Cameras
- SONY Encoders and Cameras
- Vivotek Encoders and Cameras

General Limitations

- In VideoEdge NVR 4.2.0 or later, the VideoEdge NVR does not provide any GUI for PTZ operations other than enabling PTZ and maybe Absolute Focus/Iris. Enabling PTZ only applies to Encoders, some Fixed and Fisheye cameras not PTZ Cameras. See camera specific release notes for details.
- It is recommended not to configure cameras on multiple Recorders as this may impact on stream and general performance of the camera.
- It is advised to make all changes on the camera configuration (stream configuration and feature change) via the VideoEdge GUI, unless specifically mentioned in these release notes.
- Some of our handlers will support a Generic model integration—the main aim of the Generic model support is to provide a single video stream to the NVR. All other features such as dual stream, audio, events and PTZ could be available depending on camera API, these are considered unsupported features under Generic status.
- When removing a camera from the VideoEdge NVR in version 4.6, the audio connection under Audio device tab may fail to be removed. If the audio stream is retained on VideoEdge NVR – this will prevent the camera from being re-added to the VideoEdge NVR until this stream is deleted.
- The auto-configuration feature may not be supported on some cameras when added to the VideoEdge NVR. The user can enable the second stream manually if required.
- When changing video codec from H264 to MJPEG there may be instances of an error on some cameras stating "Error could not update bitrate control" This feature is not supported and does not affect the camera Bit Rate Control functionality.
- You should not change the Codec of the camera when Gaming mode is enabled on the VENVR. If you need to change the Codec, Gaming mode should be disabled first, For Gaming mode functionality please refer to the cameras-specific user manual.
- When changing cameras between security groups there may be errors in loading the device page. To fix this please refresh the page.
- The device list might need refreshed after a configuration change has been made to reflect this on the VideoEdge NVR GUI.
- When a camera only supports one stream or does not support motion detection when adding to the VideoEdge please disable the 'Enable Smart Search' check box as these camera will not support this feature. If this is not disabled then it may cause the camera to take longer to add and require a refresh of the browser.

VideoEdge configuration with Illustra cameras running enhanced security mode

Software requirements:

Supported camera firmware

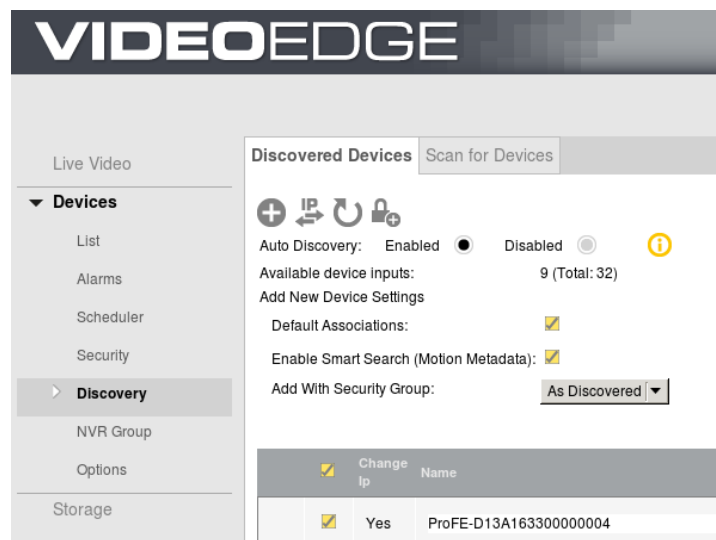
- Flex2 fw: SS004.01.00.01.0432 onwards
- Pro 12MP FE fw: SS002.01.00.00.0620 onwards
- Flex PTZ fw: SS002.01.00.00.0620 onwards
- Pro Minidome fw: 1.3.1.C15847A1455
- Illustra Pro Compact 2MP & 3MP fw: SS005.01.04.00.0037

VideoEdge versions:



- VE FW: 4.8 + NVR_Handler_Illustra_iAPI3-4.8.0.18016 or any 4.8.100 handler
- VE FW: 4.8.1 + NVR_Handler_Illustra_iAPI3-4.8.1.18328 or any 4.8.100 handler
- VE FW: 4.9.1 + iAPI3 Handler: Illustra_iAPI3-4.9.1.18012 or any 4.9.100 handler
- VE FW: 5.0 onwards (no need for handler)

Option 1: Configure the VideoEdge and cameras for enhanced security

Complete the following procedures to add cameras to VideoEdge, create a security group, and add the Illustra cameras to the security group.






Procedure 1 Adding cameras to the VideoEdge

Step	Action
1	Log in to the VideoEdge Administration Interface.
2	Select Devices , and then select Discovery .
3	Select the Discovered Devices tab.
4	Click the refresh icon,  , to discover new cameras.
5	Add discovered cameras to the VideoEdge. <ol style="list-style-type: none">Select the check boxes for any cameras that you want to add.Select  to add the selected cameras to the VideoEdge.

- End -

Procedure 2 Creating a camera security group

Step	Action
1	Select Devices , and then select Security .
2	Select  to create a new security group.
3	Enter the group credentials: <ol style="list-style-type: none">Enter a Group Name.Enter a Description.Enter a Username.Enter a Password.
Note: This is the password that the VideoEdge uses to connect to the cameras in this security group.	
	<ol style="list-style-type: none">Confirm the password in the Confirm Password field.
4	(Optional) Configure Advanced settings. <ol style="list-style-type: none">Select Advanced.Set Security Level to Medium (HTTP Digest).Enter the Port number.
Note: Ensure that the Default checkbox is selected if you want to use the default port number.	
5	Add cameras to the Security Group <ol style="list-style-type: none">Select cameras from the left hand column.Select  to add the cameras to the Security Group.

6 Select  to save the Security Group credentials.

- End -

Procedure 3 Configuring Illustra cameras (Factory Default mode)

Note:

You must complete the following procedures before you change the Camera Security mode from Standard to Enhanced:

- Adding cameras to the VideoEdge
 - Creating a camera security group
-

Step	Action
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1	Log in to the camera web interface.
---	-------------------------------------

Default username: admin

Default password: admin

2	Select the Security Mode.
---	---------------------------

a Select **Enhanced**.

b Click **Apply**.

Note:

If the Security Mode window does not appear, you must select the Security Mode from the Security menu instead.

Open to the **Security** menu.

a Select **Setup**, then select **Security**.

b Select the **Enhanced Security** checkbox.

c Click **Apply**.

3	Enter Camera Security Group Credentials
---	---

Note:

That is, the credentials for the security group that you created in VideoEdge.



4	Click Apply .
---	----------------------

- End -

Option 2: Add cameras to a VideoEdge that is already configured for enhanced security

If your VideoEdge is already configured for enhanced security, you can add cameras to a security group when you add them to VideoEdge.



Procedure 4 Creating a camera security group

Step	Action
1	Select Devices , and then select Security .
2	Select  to create a new security group.
3	Enter the group credentials: <ol style="list-style-type: none">Enter a Group Name.Enter a Description.Enter a Username.Enter a Password.
	<hr/> Note: This is the password that the VideoEdge uses to connect to the cameras in this security group. <hr/>
	<ol style="list-style-type: none">Confirm the password in the Confirm Password field.
4	(Optional) Configure Advanced settings. <ol style="list-style-type: none">Select Advanced.Set Security Level to Medium (HTTP Digest).Enter the Port number.
	<hr/> Note: Ensure that the Default checkbox is selected if you want to use the default port number. <hr/>
5	Select  to save the Security Group credentials.
	<hr/> <p style="text-align: center;">- End -</p> <hr/>

Note:

For cameras running Illustra Flex SS004.01.02.00.070 or later or Pro Compact SS005.01.04.00.0037 or later if Enhance Security is selected - The option to allow for Video over HTTP must be enabled to allow for VideoEdge Integration

Procedure 5 Add cameras to the VideoEdge

Step	Action
1	Select Devices , and then select Discovery .
2	Select the Scan for Devices tab.
3	Configure the Add New Device Settings . <ol style="list-style-type: none">Clear the Default Associations checkbox if video /audio association is not required.Clear the Enable Smart Search (Motion Metadata) checkbox to disable Smart Search for any cameras that you add manually.Select a Security Group preference from the Add With Security Group dropdown menu.
4	Configure the Device Scan Settings . <ol style="list-style-type: none">Select the Security Group from the dropdown.Select the LAN interface from the dropdown.
5	(Optional) Configure the IP address search range. <ol style="list-style-type: none">Select the Specify an IP Address Range checkbox.Enter the IP Address Range.
6	Select  to scan for devices.
7	To add the discovered camera to the VideoEdge device list, select the discovered camera and click 

- End -

Note:

For cameras running Illustra Flex SS004.01.02.00.070 or later or Pro Compact SS005.01.04.00.0037 or later if Enhance Security is selected - The option to allow for Video over HTTP must be enabled to allow for VideoEdge Integration

Alarms In/Out Edge Analytics & Enhanced Security

When Illustra Flex SS004.01.02.00.070 or later or Pro Compact SS005.01.04.00.0037 or later are on Enhanced Security, DIO Alarm events and Edge Analytics Events/Metadata will not work unless "Video over HTTP" is enabled on camera GUI: Security/Remote Access tab. Please check camera GUI, as Enhance Security will automatically disabled Video over HTTP .

TrickleStor & Enhanced Security

When Illustra Flex SS004.01.02.00.070 or later or Pro Compact SS005.01.04.00.0037 or later are on Enhanced Security, camera will be configured to HTTPS only - which the TrickleStor VENVR feature does not yet support - Please check camera GUI, and change Security/HTTP/HTTPS configuration to either Both or HTTP only to allow feature integration

American Dynamics & Illustra

Supported American Dynamics & Illustra cameras:

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
Video Encoders							
ADEIP8H	H.264, MJPEG	Yes	16/0	Yes	No	No	4.0 - 5.0.0
ADEIP8M	MJPEG, MPEG4	Yes	16/0	Yes	No	No	4.0 - 5.0.0
Box Cameras							
ADCIPEBPN	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPEBPPE	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPEBPPU	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPEBN	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPEBPE	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPEBPU	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
Indoor Mini Dome Cameras							
ADCIPE3312ICN	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3312ISN	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3312ICPE	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3312ISPE	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3312ICPU	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3312ISPU	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
Outdoor Mini Dome Cameras							
ADCIPE3712OCN	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3712OSN	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3712OCPE	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3712OCPU	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3712OSPU	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCIPE3712OSPE	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0 - 5.0.0
IP Dome Cameras							
ADVEIPSD22N	H.264, MJPEG, MPEG4	Yes	4/0	Yes	No	No	4.0 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
ADVEIPSD22P	H.264, MJPEG, MPEG4	Yes	4/0	Yes	No	No	4.0 - 5.0.0
ADVEIPSD35N	H.264, MJPEG, MPEG4	Yes	4/0	Yes	No	No	4.0 - 5.0.0
ADVEIPSD35P	H.264, MJPEG, MPEG4	Yes	4/0	Yes	No	No	4.0 - 5.0.0
Illustra 210 Mini Dome Cameras							
ADCi210-D111	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi210-D011	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi210-D121	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi210-D021	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi210-D113	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi210-D013	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi210-D123	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi210-D023	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
Illustra 600 Mini Dome Cameras							
ADCi600-D111	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D011	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D121	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D021	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D321	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D131	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D031	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D141	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D041	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D341	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D113	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D013	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D123	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D323	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D133	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D033	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
ADCi600-D143	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D043	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D343	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
Illustra 610 Mini Dome Cameras							
ADCi610-D111	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D011	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D121	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D021	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D321	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D131	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D031	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D141	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D041	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D341	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D113	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D013	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D123	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D023	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D323	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D133	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D033	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D143	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D043	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
Illustra 610LT Mini Dome Cameras							
ADCi610LT-D111	H.264, MJPEG	No	0/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610LT-D113	H.264, MJPEG	No	0/0	No	Yes	Yes	4.1 - 5.0.0
Illustra 600 Telephoto Lens Mini Dome Cameras							
ADCi600-D521	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D541	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
ADCi600-D523	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi600-D543	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
Illustra 610 Telephoto Lens Mini Dome Cameras							
ADCi610-D521	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D541	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D523	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
ADCi610-D543	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0
Illustra 400 WDR Indoor Mini Dome Cameras							
ADCi400-D011	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D012	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D013	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D014	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D031	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D032	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D033	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D034	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D051	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D052	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D053	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D054	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
Illustra 400 WDR Outdoor Mini Dome Cameras							
ADCi400-D021	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D022	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D023	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D024	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D041	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D042	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D043	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D044	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
ADCi400-D061	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D062	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D063	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-D064	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
Illustra 400 WDR Bullet Cameras							
ADCi400-B021	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-B022	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-B041	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-B042	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-B061	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-B062	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
Illustra 400 Box Cameras							
ADCi400-X001	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
ADCi400-X002	H.264, MJPEG	Yes	1/0	No	No	No	4.0 - 5.0.0
Illustra 600/610 Bullet Cameras							
ADCi600-B021	H.264, MJPEG	Yes	1/0	No	No	No	4.2.1 - 5.0.0
ADCi600-B041	H.264, MJPEG	Yes	1/0	No	No	No	4.2.1 - 5.0.0
ADCi610-B021	H.264, MJPEG	Yes	1/0	No	No	No	4.2.1 - 5.0.0
ADCi610-B041	H.264, MJPEG	Yes	1/0	No	No	No	4.2.1 - 5.0.0
Illustra 600/610 Box Cameras							
ADCi600-X011	H.264, MJPEG	Yes	1/0	No	No	No	4.2.1 - 5.0.0
ADCi610-X011	H.264, MJPEG	Yes	1/0	No	No	No	4.2.1 - 5.0.0
Illustra 600LT Bullet Cameras							
ADCi600LT-B021	H.264, MJPEG	No	1/0	No	No	No	4.2.1 - 5.0.0
Illustra 600LT Box Cameras							
ADCi600-X011	H.264, MJPEG	No	1/0	No	No	No	4.2.1 - 5.0.0
Illustra 625 PTZ Cameras							
ADCi625-P132	H.264, MJPEG	No	0/0	Yes	Yes	No	4.2.1 - 5.0.0
ADCi625-P122	H.264, MJPEG	No	0/0	Yes	Yes	No	4.2.1 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
ADCi625-P121	H.264, MJPEG	No	0/0	Yes	Yes	No	4.2.1 - 5.0.0
ADCi625-P124	H.264, MJPEG	No	0/0	Yes	Yes	No	4.2.1 - 5.0.0
ADCi625-P123	H.264, MJPEG	No	0/0	Yes	Yes	No	4.2.1 - 5.0.0
ADCi625-P232	H.264, MJPEG	Yes	4/1	Yes	Yes	No	4.3 - 5.0.0
ADCi625-P222	H.264, MJPEG	Yes	4/1	Yes	Yes	No	4.3 - 5.0.0
ADCi625-P221	H.264, MJPEG	Yes	4/1	Yes	Yes	No	4.3 - 5.0.0
ADCi625-P223	H.264, MJPEG	Yes	4/1	Yes	Yes	No	4.3 - 5.0.0
ADCi625-P224	H.264, MJPEG	Yes	4/1	Yes	Yes	No	4.3 - 5.0.0
Illustra Pro PTZ Cameras							
IPS02P6ANBTT	H264, MJPEG	No	0/0	Yes	Yes	No	4.6 - 5.0.0
IPP02P6OCWTT	H264, MJPEG	No	0/0	Yes	Yes	No	4.6 - 5.0.0
IPP02P6BCWTT	H264, MJPEG	No	0/0	Yes	Yes	No	4.6 - 5.0.0
IPP02P6OSWTT	H264, MJPEG	No	0/0	Yes	Yes	No	4.6 - 5.0.0
IPP02P6BSWTT	H264, MJPEG	No	0/0	Yes	Yes	No	4.6 - 5.0.0
IPP02P6ANBTT	H264, MJPEG	Yes	4/1	Yes	Yes	No	4.6 - 5.0.0
IPS02P6OCWTT	H264, MJPEG	Yes	4/1	Yes	Yes	No	4.6 - 5.0.0
IPS02P6BCWTT	H264, MJPEG	Yes	4/1	Yes	Yes	No	4.6 - 5.0.0
IPS02P6OSWTT	H264, MJPEG	Yes	4/1	Yes	Yes	No	4.6 - 5.0.0
IPS02P6BSWTT	H264, MJPEG	Yes	4/1	Yes	Yes	No	4.6 - 5.0.0
Illustra Pro LT 2MP Bullet							
IPL02B2BNWIY	H.264, MJPEG	No	1/1	No	Yes	No	4.4 - 5.0.0
IPL02B1BNWIY	H.264, MJPEG	No	1/1	No	Yes	No	4.4 - 5.0.0
Illustra Pro 2MP Micro Cameras							
IPS02FANWSY1	H.264, MJPEG	No	1/1	No	Yes	No	4.7.1 - 5.0.0
IPS02FANWSY2	H.264, MJPEG	No	1/1	No	Yes	No	4.7.1 - 5.0.0
IPS02FANWSY3	H.264, MJPEG	No	1/1	No	Yes	No	4.7.1 - 5.0.0
Illustra Pro 610 Compact Mini-Bullet Cameras							
ADCi610-M022	H.264, MJPEG	No	1/1	No	Yes	No	4.4 - 5.0.0
Illustra Pro 600/610 Compact Mini-Dome Cameras							

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
ADCi600-M111	H.264, MJPEG	No	0/0	No	Yes	No	4.3 - 5.0.0
ADCi610-M111	H.264, MJPEG	No	0/0	No	Yes	No	4.3 - 5.0.0
Illustra 825 5MP Fisheye Cameras							
ADCi825-F311	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0
ADCi825-F312	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0
Illustra Pro 12MP HD Fisheye Cameras							
IPS12FFOCWIY	H.264, MJPEG	Yes	1/1	No	Yes	No	4.8 - 5.0.0
IPS12FFOCWIYT	H.264, MJPEG	Yes	1/1	No	Yes	No	4.8 - 5.0.0
IPS12FFOCWIYA	H.264, MJPEG	Yes	1/1	No	Yes	No	4.8 - 5.0.0
Illustra Flex Series Cube							
ADCi600F-W012	H.264, MJPEG	Yes	0/0	No	Yes	No	4.4 - 5.0.0
Illustra Flex Series Box							
ADCi600F-X002	H.264, MJPEG	Yes	1/1	No	Yes	No	4.4 - 5.0.0
ADCi800F-X002	H.264, MJPEG	Yes	1/1	No	Yes	No	4.4 - 5.0.0
IFS03XNANWTT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex Series Bullet							
ADCi600F-B521	H.264, MJPEG	Yes	1/1	No	Yes	No	4.4 - 5.0.0
ADCi800F-B521	H.264, MJPEG	Yes	1/1	No	Yes	No	4.4 - 5.0.0
IFS03B1BNWIT/ IFS03B1ONWIT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex Series Dome							
ADCi600F-D021	H.264, MJPEG	Yes	1/1	No	Yes	No	4.4 - 5.0.0
ADCi600F-D111	H.264, MJPEG	Yes	1/1	No	Yes	No	4.4 - 5.0.0
ADCi800F-D021	H.264, MJPEG	Yes	1/1	No	Yes	No	4.4 - 5.0.0
ADCi800F-D111	H.264, MJPEG	Yes	1/1	No	Yes	No	4.4 - 5.0.0
IFS03D1ICWTT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
IFS03D1OCWIT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex PTZ Series & Flex IR PTZ Series							
IFS02P5ICWTY	H.264, MJPEG	Yes	2/1	Yes	Yes	No	4.8 - 5.0.0
IFS02P5OCWTY	H.264, MJPEG	Yes	2/1	Yes	Yes	No	4.8 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
IFS02P6ONWIT	H.264, MJPEG	Yes	2/2	Yes	Yes	No	4.8 - 5.0.0
IFS02P6INWIT	H.264, MJPEG	Yes	2/2	Yes	Yes	No	4.8 - 5.0.0
Illustra Flex 3MP flex2 Series Dome							
IFS03D1ICWTT,	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
IFS03D1OCWIT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex 3MP flex2 Series Box							
IFS03XNANWTT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex 3MP flex2 Series Bullet							
IFS03B1BNWIT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex 3MP flex2 Series Compact							
IFS03CFOCWST	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex 4K Series Domes							
IFS08D2ICWTT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
IFS08D2OCWIT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex 4K Series Box							
IFS08XNANWTT	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Flex 4K Series Bullet							
IFS08B2ONWIT/ IFS082ONWITA	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8 - 5.0.0
Illustra Pro Compact							
IPS02CFOCWST	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8 - 5.0.0
IPS03CFOCWST	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8 - 5.0.0
Illustra Pro Series Dome							
IPS02D2ICWTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2ICWIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2OCWTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2OCWIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2ISWTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2ISWIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
IPS02D2OSWTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2OSWIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2ICBTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2ICBIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2OCBTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2OCBIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2ISBTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2ISBIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2OSBTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D2OSBIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3ICWTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3ICWIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3ISWTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3ISWIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3ICBTT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3ICBIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3ISBIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3ISBIT	H.246.MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS02D3OCWIT	H.246.MJPEG	Yes	2/1	Yes	Yes	Yes	4.8 - 5.0.0
IPS02D0OCWTT	H.246.MJPEG	Yes	2/1	Yes	Yes	Yes	4.8 - 5.0.0
IPS03D2ICWTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2ICWIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2OCWTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2OCWIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2ISWTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2ISWIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2OSWTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2OSWIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2ICBTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2ICBIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
IPS03D2OCBTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2OCBIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2ISBTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2ISBIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2OSBTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D2OSBIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D3ICWTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D3ISWTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D3ISWIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D3ICBTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D3ICBIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D3ISBTT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D3ISBIT	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS03D3OCWIT	H.246.MJPEG	Yes	2/1	Yes	Yes	Yes	4.8 - 5.0.0
IPS03D0OCWTT	H.246.MJPEG	Yes	2/1	Yes	Yes	Yes	4.8 - 5.0.0
IPS05D2ICWTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2ICWIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2OCWTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2OCWIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2ISWTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2ISWIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2OSWTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2OSWIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2ICBTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2ICBIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2OCBTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2OCBIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2ISBTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2ISBIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D2OSBTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
IPS05D2OSBIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D3ICWTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D3ISWTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D3ISWIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D3ICBTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D3ICBIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D3ISBTY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D3ISBIY	H.264, MJPEG	Yes	2/1	No	Yes	Yes	4.6 - 5.0.0
IPS05D3OCWIY	H.246.MJPEG	Yes	2/1	Yes	Yes	Yes	4.8 - 5.0.0
IPS05D0OCWTY	H.246.MJPEG	Yes	2/1	Yes	Yes	Yes	4.8 - 5.0.0
IP IPVM Monitor							
ADLCD22PPS2W	H.264, MJPEG	No	0	No	Yes	No	4.6 - 5.0.0
ADLCD27PPS2W	H.264, MJPEG	No	0	No	Yes	No	4.6 - 5.0.0
ADLCD32PPS2W	H.264, MJPEG	No	0	No	Yes	No	4.6 - 5.0.0
ADLCD22PPS2 B	H.264, MJPEG	No	0	No	Yes	No	4.6 - 5.0.0
ADLCD27PPS2B	H.264, MJPEG	No	0	No	Yes	No	4.6 - 5.0.0
ADLCD32PPS2B	H.264, MJPEG	No	0	No	Yes	No	4.6 - 5.0.0

Note:

The iAPI3 camera handlers support Generic cameras for any unlisted models. If a camera is not in the supported list but compatible with the iAPI3, VideoEdge will attempt to support it as a Generic camera. Only video and audio functions are supported for Generic cameras.

Illustra Essentials

Illustra Essentials VideoEdge camera handler is fully integrated with the Illustra Essentials line of IP cameras. Illustra Essentials, generally, doesn't change the core API interface for their cameras. VideoEdge camera handler is based on Illustra Essentials core API version 1.40. As Illustra Essentials continues to release new cameras to market, the VideoEdge camera handler provides a generic camera handler that can connect to any Illustra Essentials cameras not listed in the available camera list. The generic camera handler will gather the required information and present this to VideoEdge NVR.

Supported Illustra Essentials cameras:

Model	CODEC Supported	Audio	I/O	PTZ	Edge Motion Detection	Edge Motion Detection Metadata	VideoEdge Versions Supported	Certification
Fixed Cameras								
IES01CFACWSY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES01CFBCWIY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES01MFBNWIY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES01CFBCWIYA	H.264, MJPEG	No	No	No	Yes	No	4.8 - 5.0.0	Tested & Certified
IES01MFBNWIYA	H.264, MJPEG	No	No	No	Yes	No	4.8 - 5.0.0	Tested & Certified
IES02CFACWSY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES02CFBCWIY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES02MFBNWIY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES02CFBCWIYA	H.264, MJPEG	No	No	No	Yes	No	4.8 - 5.0.0	Tested & Certified
IES02MFBNWIYA	H.264, MJPEG	No	No	No	Yes	No	4.8 - 5.0.0	Tested & Certified
IES02CFBCWIYB	H.264, MJPEG	No	No	No	Yes	No	4.8.1 - 5.0.0	Tested & Certified
IES02MFBNWIYB	H.264, MJPEG	No	No	No	Yes	No	4.8.1 - 5.0.0	Tested & Certified
Varifocal Camera								
IES01D1OCWIY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES02D1OCWIY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES01B1BNWIY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES02B1BNWIY	H.264, MJPEG	No	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
IES01D1OCWIYA	H.264, MJPEG	No	No	No	Yes	No	4.8 - 5.0.0	Tested & Certified
IES02D1OCWIYA	H.264, MJPEG	No	No	No	Yes	No	4.8 - 5.0.0	Tested & Certified
IES01B1BNWIYA	H.264, MJPEG	No	No	No	Yes	No	4.8 - 5.0.0	Tested & Certified
IES02B1BNWIYA	H.264, MJPEG	No	No	No	Yes	No	4.8 - 5.0.0	Tested & Certified

Model	CODEC Supported	Audio	I/O	PTZ	Edge Motion Detection	Edge Motion Detection Metadata	VideoEdge Versions Supported	Certification
IES02D1OCWIYB	H.264, MJPEG	No	No	No	Yes	No	4.8.1 - 5.0.0	Tested & Certified
IES02B1BNWIYB	H.264, MJPEG	No	No	No	Yes	No	4.8.1 - 5.0.0	Tested & Certified
IES02D1OCWIYC	H.264, MJPEG	No	No	No	Yes	No	4.8.1 - 5.0.0	Tested & Certified
IES02B1BNWIYC	H.264, MJPEG	No	No	No	Yes	No	4.8.1 - 5.0.0	Tested & Certified
Generic Camera								
Generic camera	H.264, MJPEG	Yes	Yes	Yes	Yes	No	4.6.0 - 5.0.0	Works as designed

This version of the VideoEdge camera handler is fully integrated with the ACTi Corporation line of IP cameras. ACTi has a number of API's (Application Programming Interface) camera handlers to communicate with their cameras. This version of the VideoEdge NVR is fully integrated with the ACM models (cameras using firmware version v3.13.16-AC) and TCM models (cameras using firmware version v4.11.09-AC). As ACTi continues to release new cameras to the market, the VideoEdge camera handler provides a generic camera driver that can connect to any ACM or TCM cameras not listed in the available camera list. The generic ACTi driver will gather the required information and present this to the VideoEdge NVR. Supported ACTi Corporation cameras:

Model	CODEC Supported	Audio	I/O	VideoEdge Versions Supported	Certification
Fixed Cameras					
ACM5611	MJPEG	No	1/0	4.1 - 5.0.0	Works as designed
Bullet Cameras					
ACM1231	MJPEG	No	0/0	4.1 - 5.0.0	Tested & Certified
TCM1231	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Works as designed
TCM1511	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Works as designed
Cube Cameras					
ACM4201	MJPEG	No	1/0	4.1 - 5.0.0	Works as designed
TCM4201	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Works as designed
Fixed Dome Cameras					
ACM3401	MJPEG	No	1/0	4.1 - 5.0.0	Works as designed
ACM3511	MJPEG	No	1/0	4.1 - 5.0.0	Works as designed
ACM3701	MJPEG	No	0/0	4.1 - 5.0.0	Works as designed
ACM7411	MJPEG	No	0/0	4.1 - 5.0.0	Works as designed
TCM3401	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Works as designed
TCM3411	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Works as designed
TCM3511	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Tested & Certified
TCM7411	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Works as designed
TCM7811	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Works as designed
Box Cameras					
TCM5311	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Tested & Certified
TCM5611	MJPEG, H.264	No	1/0	4.1 - 5.0.0	Works as designed
Generic					
All other models	Single (MJPEG)	No	0/0	4.1 - 5.0.0	Works as designed

VideoEdge camera handler is fully integrated with the Arecont Vision line of megapixel cameras including full support for the 180° and 360° lines of panoramic view cameras. Arecont Vision camera operating system (firmware) is continually evolving; please make sure your camera is running the most current firmware available from Arecont Vision (available from <http://www.arecontvision.com>). As Arecont Vision continues to release new cameras, there may be instances where specific Arecont Vision cameras are not listed in the supported camera list. A generic Arecont Vision camera handler is available for these cameras.

VideoEdge camera handler supports the following firmware versions:

- **M-JPEG cameras** – firmware version 64327 or higher
- **H.264/M-JPEG cameras** – firmware version 65139 or higher

Supported Arecont Vision cameras:

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
Fixed Cameras						
AV1115	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1115DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1115AI	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1125	H.264	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1125DN	H.264	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1125IR	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1300	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1300DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1300AI	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1300M	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1305	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1305DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1305AI	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1310	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1310DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1315	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1315DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
AV1325	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1325DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1325IR	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2100	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2100DN	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2100AI	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2100IR	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2100M	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2105	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2105DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2105AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2110	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2110DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2115	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2115DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2115AI	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2125	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2125DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2125IR	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2805	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2805DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2815	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2815DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2825	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2825DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2825IR	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3100	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3100DN	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3100AI	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3105	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3105DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
AV3105AI	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3110	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3110DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3115	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3115DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3115AI	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3125	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3125DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3125IR	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3155	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3155DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5100	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5100DN	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5100AI	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5100M	MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5105	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5105DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5105AI	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5110	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5110DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5115	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5115DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5115AI	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5125DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV08ZMV-300	H.264, MJPEG	No	1/0	Yes	5.0.0	Tested & Certified
Mini Dome Cameras						
AV1355	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1355DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2155	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2155DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5155	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
AV5155DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1555DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2555DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2556DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3555DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3556DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV5555DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV1455DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2455DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2456DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3455DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3456DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV5455DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV1145DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2145DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2146DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3145DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3146DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV5145DN	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2246PM	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2245PM	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3245PM	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3246PM	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV5245	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV1245	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV1255	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2255	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2256	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3255	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3256	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV5255	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
AV10255	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
Panoramic Mini Dome Cameras						
AV8180	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV8185	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV8185DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV8360	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV8365	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV8365DN	H.264, MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV20185DN	H.264, MJPEG	No	0/0	No	4.3 - 5.0.0	Tested & Certified
AV20185CO	H.264, MJPEG	No	0/0	No	4.3 - 5.0.0	Works as designed
AV20365DN	H.264, MJPEG	No	0/0	No	4.3 - 5.0.0	Works as designed
AV20365CO	H.264, MJPEG	No	0/0	No	4.3 - 5.0.0	Works as designed
AV12275DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV12276DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV20275DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV12176DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Tested & Certified
AV20175DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV5585PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Tested & Certified
AV12585PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV12586PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV20585PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV20565DN	H.264, MJPEG	No	0/0	Yes	4.8.1 - 5.0.0	Works as designed
AV12186DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV12366DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV40185DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
MegaVideo Box Cameras						
AV1115	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1115DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1115AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1300AI	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1300DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
AV1305	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1305AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1305DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1310	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1310DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV1315	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1315DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2100AI	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2100DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2105	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2105AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2105DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2110	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2110DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV2115	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2115DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2115AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2805DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2805AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2815	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2815DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3110	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3100AI	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3100DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV3105AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3105DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3115	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3115DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3115AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5100AI	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5100DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
AV5105	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5105AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5105DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5110	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5110DN	MJPEG	No	0/0	No	4.0.1 - 5.0.0	Works as designed
AV5115	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5115DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5115AI	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV10005	MJPEG	No	0/0	No	4.3 - 5.0.0	Tested & Certified
AV10115	H.264, MJPEG	No	0/0	No	4.3 - 5.0.0	Works as designed
MegaDome Dome Cameras						
AV10255	H.264, MJPEG	No	0/0	No	4.3 - 5.0.0	Works as designed
AV1355	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2155	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3155	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5155	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1355	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1355DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2155DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3155DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5155DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3256PMTIR	H.264, MJPEG	No	No	Yes	4.8.1 - 5.0.0	Works as designed
AV3256PMTIR-S	H.264, MJPEG	No	No	Yes	4.8.1 - 5.0.0	Tested & Certified
AV5255AM	H.264, MJPEG	No	No	Yes	4.8.1 - 5.0.0	Works as designed
AV5255AM-H	H.264, MJPEG	No	No	Yes	4.8.1 - 5.0.0	Works as designed
AV5255PMIR-SH	H.264, MJPEG	No	No	Yes	4.8.1 - 5.0.0	Tested & Certified
AV1215PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2215PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2216PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3215PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3216PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
AV5215PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV10215PM	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3236DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2116DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3116DN	H.264, MJPEG	No	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV08ZMD-400	H.264, MJPEG	No	1/0	Yes	5.0.0	Works as designed
AV3356PMIR-SA	H.264, MJPEG	Yes	0/0	Yes	5.0.0	Tested & Certified
AV2355RS	H.264, MJPEG	No	0/0	Yes	5.0.0	Tested & Certified
MegaBall Bullet Cameras						
AV5245DN-01-DA	H.264, MJPEG	No	0/0	Yes	4.8.1 - 5.0.0	Works as designed
MegaView Bullet Cameras						
AV1325	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1325IR	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1325DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2825	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2825IR	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2825DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1125IR	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1125DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2125IR	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV2125DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3125IR	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV3125DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5125IR	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV5125DN	H.264, MJPEG	No	0/0	No	4.0 - 5.0.0	Works as designed
AV1225	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2225	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV2226	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3225	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV3226	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
AV5225	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Motion Detection	VideoEdge Versions Supported	Certification
AV10225	H.264, MJPEG	Yes	1/0	Yes	4.8.1 - 5.0.0	Works as designed
Generic						
All other models	DPC*	DPC*	DPC*	DPC*	4.0 - 5.0.0	Works as designed

* DPC - depends on camera capability

Note:

Each of the Multi-Sensor cameras are comprised of four individual cameras housed together as a “single camera”. Please make sure you have sufficient camera licenses available with your VideoEdge NVR. When adding cameras to the VE NVR ensure that four camera slots are available (e.g. when adding three separate cameras the first camera should be added to slot 1 (this camera will use slots 1,2,3,4), the second cameras should be added to slot 5 (it will use slots 5,6,7,8). The third camera should be added to slot 9 (it will use 9,10,11,12), and so on.

AXIS Communications

The VideoEdge camera handler is fully integrated with the AXIS communications line of IP cameras and video encoders. AXIS has number of API's (Application Programming Interface) camera handlers to communicate with their cameras. The VideoEdge NVR is fully integrated with the VAPIX® API Version 2 (cameras using firmware version 4.xx) and VAPIX® API Version 3 (cameras using firmware version 5.xx). As AXIS continues to release new cameras to the market, the VideoEdge camera handler provides a generic AXIS camera driver that can connect to any VAPIX® 2 & 3 camera. The generic driver will gather all required information, including camera name and functionality, and present it to the VideoEdge NVR.

Supported Camera API & Models

API Version	Minimum Camera Firmware Version	Handler Version
VAPIX API Version 2	Firmware version 4.xxx	4.4.0.800, 4.9.0.0.2024
VAPIX API Version 3	Firmware version 5.xxx and later	4.4.0.2044, 4.9.0.0.2024, 5.0.100.2010

Supported Axis devices:

Model	CODEC Supported	Audio	I/O	PTZ Supported	Edge Motion Detection	Edge Motion Detection Metadata	VideoEdge Versions Supported	Certification
Encoders								
M7001	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
M7011	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q7401	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0 - 5.0.0	Works as designed
Q7404	H.264, MJPEG	Yes	8/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
Q7406	H.264, MJPEG	Yes	2/0	Yes	Yes	Yes	4.0 - 5.0.0	Tested & Certified
Q7414	H.264, MJPEG	Yes	8/0	Yes	Yes	Yes	4.0 - 5.0.0	Tested & Certified
240Q	MJPEG, MPEG4	No	4/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
241Q	MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.0 - 5.0.0	Works as designed
241QA	MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
241S	MJPEG, MPEG4	No	4/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
241SA	MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
243Q	MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.0 - 5.0.0	Tested & Certified
243SA	MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed

247S	MJPEG, MPEG4	Yes	1/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
M7010	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
M7014	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
M7016	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
P7210	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
P7214	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
P7216	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
P7224	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q7411	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q7424-R	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q7436	H264, MJPEG	No	8/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Tested & Certified
P7224 Blade	H264, MJPEG	Yes	2/2	Yes	Yes	Yes	4.4 - 5.0.0	Works as designed
Q7414 Blade	H264, MJPEG	Yes	2/2	Yes	Yes	Yes	5.0.0	Works as designed
Q7424-R Mk II	H264, MJPEG	Yes	2/2	Yes	Yes	Yes	4.4 - 5.0.0	Works as designed
Q7436 Blade	H264, MJPEG	No	2/2	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Fixed Cameras								
M1011	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M1011-W	H.264, MJPEG, MPEG4	No	0/0	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
M1025	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M1124	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M1124-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M1125	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M1125-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M1145	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M1145-L	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M1031-W	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
M1054	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M1103	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M1104	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M1113	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M1114	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
P1311	H.264, MJPEG,	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified

	MPEG4							
P1343	H.264, MJPEG, MPEG4	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
P1343-E	H.264, MJPEG, MPEG4	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P1344	H.264, MJPEG, MPEG4	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
P1344-E	H.264, MJPEG, MPEG4	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P1346	H.264, MJPEG, MPEG4	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
P1346-E	H.264, MJPEG, MPEG4	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P1347	H.264, MJPEG, MPEG4	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
P1347-E	H.264, MJPEG, MPEG4	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P1364	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1364-E	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1365 Mk II	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1365	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1365-E Mk II	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1357-E	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1405-E	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1405-LE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1425-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1425-LE	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1427-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1427-LE	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1428-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1435-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1435-LE	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q1614	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q1614-E	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q1635	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q1635-E	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q1755	H.264, MJPEG	Yes	2/0	Zoom only	Yes	Yes	4.0 - 5.0.0	Tested & Certified

Q1755-E	H.264, MJPEG	Yes	2/0	Zoom only	Yes	Yes	4.0.1 - 5.0.0	Works as designed
Q1775	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q1775-E	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
206	MJPEG, MPEG4	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
206-M	MJPEG, MPEG4	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
206-W	MJPEG, MPEG4	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
207	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
207-MW	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
207-W	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
210	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0 - 5.0.0	Tested & Certified
210A	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0 - 5.0.0	Tested & Certified
211	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
211-A	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0 - 5.0.0	Tested & Certified
211-M	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0 - 5.0.0	Tested & Certified
211-W	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0 - 5.0.0	Tested & Certified
223M	MJPEG, MPEG4	No	2/0	No	Yes	No	4.0.1 - 5.0.0	Tested & Certified
225FD	MJPEG, MPEG4	No	2/0	No	Yes	No	4.0 - 5.0.0	Tested & Certified
M1004-W	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M1013	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M1014	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M1033-W	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M1034-W	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M1143-L	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M1144-L	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M2014-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
P1353	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
P1354	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
P1355	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
P1357	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Tested & Certified
Q1602	H.264, MJPEG	Yes	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
Q1602-E	H.264, MJPEG	Yes	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
Q1604	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
Q1604-E	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed

Q1765-LE	H.264, MJPEG	Yes	2/2	Zoom only	Yes	Yes	4.4 – 5.0.0	Works as designed
Q1615	H264, MJPEG	Yes	2/0	No	Yes	Yes	4.8.1 - 5.0.0	Tested & Certified
Q1615-E	H264, MJPEG	Yes	2/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M1045-LW	H264,MJPEG	Yes	0/0	No	Yes	Yes	5.0.0	Works as designed
M1065-L	H264,MJPEG	Yes	0/0	No	Yes	Yes	5.0.0	Works as designed
M1065-LW	H264,MJPEG	Yes	0/0	No	Yes	Yes	5.0.0	Works as designed
M2025-LE	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M2026-LE	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M2026-LE Mk II	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P1254	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P1245	H264,MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P1264	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P1367	H264,MJPEG	Yes	2/0	No	Yes	Yes	5.0.0	Works as designed
P1405-LE Mk II	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P1425-LE Mk II	H264,MJPEG	No	1/1	No	Yes	Yes	5.0.0	Works as designed
Q1615 Mk II	H264,MJPEG	Yes	2/0	No	Yes	Yes	5.0.0	Works as designed
Q1615-E Mk II Mk II	H264,MJPEG	Yes	2/0	No	Yes	Yes	5.0.0	Works as designed
Q1659	H264,MJPEG	Yes	2/0	No	Yes	Yes	5.0.0	Works as designed
Fixed Dome Cameras								
M3011	H.264, MJPEG, MPEG4	No	0/0	No	Yes	Yes	4.0 - 5.0.0	Works as designed
M3014	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
M3113-R	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M3113-VE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M3114-R	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M3114-VE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
M3203	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
M3203-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.0 - 5.0.0	Works as designed
M3204	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.1 - 5.0.0	Tested & Certified
P3301	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
P3301-V	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.0 - 5.0.0	Works as designed
P3304	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
P3304-V	H.264, MJPEG	Yes	1/0	No	Yes	Yes	4.0 - 5.0.0	Works as designed

P3343	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
P3343-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Works as designed
P3343-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Works as designed
P3344	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Tested & Certified
P3344-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Works as designed
P3344-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0 - 5.0.0	Works as designed
P3346	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
P3346-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P3346-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
209FD	MJPEG, MPEG4	No	0/0	No	Yes	No	4.0 - 5.0.0	Tested & Certified
209FD-R	MJPEG, MPEG4	No	0/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
209MFD	MJPEG, MPEG4	No	0/0	No	Yes	No	4.0 - 5.0.0	Tested & Certified
209MFD-R	MJPEG, MPEG4	No	0/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
216FD	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0 - 5.0.0	Works as designed
216FD-V	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
216MFD	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
216MFD-V	MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.0.1 - 5.0.0	Works as designed
M3004-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3005-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3006-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3007-P	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3007-PV	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Tested & Certified
M3024-LVE	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3025-VE	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3026-VE	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3027-PVE	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3037-PVE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3044-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3045-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
M3046-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
P3214-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
P3214-VE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed
P3215-V	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 - 5.0.0	Works as designed

P3215-VE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3224-LV	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3224-LVE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3225-LV	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3225-LVE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3314-Z	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3314-ZL	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3315-Z	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3315-ZL	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3364-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3364-LV	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3364-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3364-LVE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3365-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3365-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3707-PE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3904-R	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3905-R	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3905-RE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3915-R	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
Q3505-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
Q3505-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
Q3708-PVE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
Q3709-PVE	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
Q8414-LVS	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3353	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3354	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3363-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3363-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3384-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3384-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3367-V	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P3367-VE	H.264, MJPEG	Yes	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed

M3044-WV	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M3045-WV	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M3047-P	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M3048-P	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M3104-L	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M3104-LVE	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M3105-L	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M3105-LVE	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
M3106-L Mk II	H264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3224-LV Mk II	H264,MJPEG	Yes	0/0	No	Yes	Yes	5.0.0	Works as designed
P3224-V Mk II	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3225-LV Mk II	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3225-LVE Mk II	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3225-V Mk II	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3225-VE Mk II	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3227-LV	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3227-LVE	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3228-LV	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
P3228-LVE	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
Covert cameras								
P1204	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P1214	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P1214-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P1244	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P1224-E	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P8513	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P8514	H.264, MJPEG	No	0/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
P8524	H.264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P8535	H.264, MJPEG	Yes	4/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
F34	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
F41	H.264, MJPEG	Yes	4/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
F44	H.264, MJPEG	Yes	4/0	No	Yes	Yes	4.8.1 - 5.0.0	Tested & Certified
FA54	H.264, MJPEG	Yes	4/0	No	Yes	Yes	5.0.0	Tested & Certified

PTZ Cameras								
212PTZ	MJPEG, MPEG4	Yes	1/0	Yes	Yes	No	4.0 - 5.0.0	Tested & Certified
212PTZ-V	MJPEG, MPEG4	Yes	1/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
213PTZ	MJPEG, MPEG4	Yes	2/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
214PTZ	MJPEG, MPEG4	Yes	1/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
215PTZ	MJPEG, MPEG4	Yes	1/0	Yes	Yes	No	4.0 - 5.0.0	Works as designed
215PTZ-E	MJPEG, MPEG4	Yes	1/0	Yes	Yes	No	4.0.1 - 5.0.0	Tested & Certified
PTZ Dome Cameras								
P5512	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
P5512-E	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P5522	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
P5522-E	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P5532	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
P5532-E	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P5534	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Works as designed
P5534-E	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Works as designed
Q6032-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.0 - 5.0.0	Works as designed
Q6034	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Works as designed
Q6034-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.0.1 - 5.0.0	Works as designed
231D+	MJPEG, MPEG4	No	0/0	Yes	Yes	No	4.0.1 - 5.0.0	Tested & Certified
232D+	MJPEG, MPEG4	No	0/0	Yes	Yes	No	4.0.1 - 5.0.0	Works as designed
233D	MJPEG, MPEG4	Yes	4/4	Yes	Yes	No	4.0 - 5.0.0	Tested & Certified
M5013	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.1 - 5.0.0	Works as designed
M5014	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.1 - 5.0.0	Tested & Certified
Q6000	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6000-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6035	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Tested & Certified
Q6035-E	H.264, MJPEG	No	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q6035-C	H.264, MJPEG	No	2/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q6042	H.264, MJPEG	Yes	2/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q6042-C	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6042-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q6042-S	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed

Q6044	H.264, MJPEG	Yes	2/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q6044-C	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6044-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q6044-S	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6045	H.264, MJPEG	Yes	2/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q6045 Mk II	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6045-C Mk II	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6045-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q6045-E Mk II	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6045-S Mk II	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6114	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6114-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6115	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6115-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6128	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6128-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q6155-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q8631-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q8632-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q8665-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q8665-IE	H.264, MJPEG	No	0/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P5414-E	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
P5415-E	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
P5544	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
P5514	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P5514-E	H.264, MJPEG	No	4/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P5515	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Tested & Certified
P5515-E	H.264, MJPEG	No	4/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P5635	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P5635-E	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
P5635 MK II	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
V5914	H.264, MJPEG	Yes	2/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed
V5915	H.264, MJPEG	Yes	2/0	Yes	Yes	Yes	4.8.1 - 5.0.0	Works as designed

P5624-E Mk II	H.264, MJPEG	No	0/0	Yes	Yes	Yes	5.0.0	Works as designed
M5525-E	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	5.0.0	Works as designed
P5635-E Mk II	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6000-E Mk II	H.264, MJPEG	No	0/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6052	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6052-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6054 Mk II	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6054-E Mk II	H.264, MJPEG	No	0/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6055	H.264, MJPEG	Yes	4/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6055-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6055-C	H.264, MJPEG	No	0/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6055-S	H.264, MJPEG	No	0/0	Yes	Yes	Yes	5.0.0	Works as designed
Q6124-E	H.264, MJPEG	No	0/0	Yes	Yes	Yes	5.0.0	Works as designed
Q8741-E	H.264, MJPEG	No	4/0	Yes	Yes	Yes	5.0.0	Works as designed
Q8742-E	H.264, MJPEG	No	4/0	Yes	Yes	Yes	5.0.0	Works as designed
Thermal Cameras								
Q1910	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
Q1910-E	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
Q1921	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.0.1 - 5.0.0	Tested & Certified
Q1921-E	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.0.1 - 5.0.0	Works as designed
Q1922	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
Q1922-E	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
Q1931-E	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.4 – 5.0.0	Works as designed
Q1932-E	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q1941-E	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q2901-E	H.264, MJPEG	Yes	2/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q8721-E	H.264, MJPEG	Yes	0/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
Q8722-E	H.264, MJPEG	Yes	0/0	Yes	Yes	Yes	4.4 – 5.0.0	Works as designed
M5013-V	H.264, MJPEG	Yes	0/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
M5014-V	H.264, MJPEG	Yes	0/0	No	Yes	Yes	4.8.1 - 5.0.0	Works as designed
Q1941-E PT Mount	H.264, MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
Q1942-E	H.264, MJPEG	Yes	2/2	No	Yes	Yes	5.0.0	Works as designed
Q1942-E PT	H.264, MJPEG	Yes	2/2	No	Yes	Yes	5.0.0	Works as designed

Mount								
Q2901-E PT Mount	H.264	No	0/0	No	Yes	Yes	5.0.0	Works as designed
Explosion-Protected								
XF40-Q1765	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
XP40-Q1765	H264,MJPEG	No	0/0	No	Yes	Yes	5.0.0	Works as designed
Audio I/O Box								
P8221	No	Yes	8/0	Yes	No	No	4.4 - 5.0.0	Tested & Certified
Network door stations								
A8004-VE	H264,MJPEG	Yes	4/2	Yes	MD	Yes	5.0.0	Works as designed
A8105-E	H264,MJPEG	Yes	4/2	Yes	MD	Yes	5.0.0	Works as designed
Generic								
All other models	DPC*	DPC*	DPC*	DPC*	DPC*	DPC*	4.0.1 – 5.0.0	Works as designed

* DPC - depends on camera capability.

Note:

- For devices in I/O column which have 1 number present i.e. “2, 4 or 8” this is because the I/O ports are configurable. In the case of it showing, for example, 1/1, 2/0, 2/2, the I/O ports are not configurable.
 - Cameras which are listed as “Tested and Certified” have been extensively tested against VideoEdge. Those which are listed as “Works as Designed” should be assumed to work based on the VAPIX2/VAPIX3 version of the camera firmware, however they have not been tested or verified against VideoEdge. They may have limitations and issues.
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VideoEdge camera handler is fully integrated with the Bosch communications line of IP cameras. The VideoEdge NVR is fully integrated with the cameras (with Bosch API version 3.0). As Bosch continues to release new cameras to the market, the VideoEdge camera handler provides a generic Bosch camera driver that can connect to (compatible with Bosch API version 3.0) camera. Supported Bosch cameras:

Model	CODEC Supported	Audio	I/O	VideoEdge Versions Supported	Certification
AutoDome (Supported Firmware v15500552)					
VJR-821-ICCV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
VJR-811-ICCV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
VJR-821-IWCV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
VJR-811-IWCV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Tested & Certified
VJR-821-ICTV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
VJR-811-ICTV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
VJR-821-IWTV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
VJR-811-IWTV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
VG5-825-ECEV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Tested & Certified
VG5-825-EDEV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
NBN (Supported Firmware v5950050)					
Dinion NBN-498-28	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Tested & Certified
Dinion NBN-498-28V	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
Dinion NBN-498-28WV	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
Dinion NBN-498-28W	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
Dinion NBN-921-P	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Tested & Certified
Dinion NBN-921-2P	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
Dinion NBN-921-IP	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
Dinion NBN-832V-P	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Works as designed
Dinion NBN-832V-IP	H.264, MJPEG	Yes	2/0	4.2.1 - 5.0.0	Tested & Certified
Dinion NBC-265-P	H.264, MJPEG	Yes	1/0	4.2.1 - 5.0.0	Tested & Certified
AutoDome 700 (Supported Firmware v5.80.0625)					
VG5-713-CCE2	H.264, MJPEG	Yes	2/0	4.3 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	VideoEdge Versions Supported	Certification
VG5-723-CCE2	H.264, MJPEG	Yes	2/0	4.3 - 5.0.0	Works as designed
VG5-713-ECE2	H.264, MJPEG	Yes	2/0	4.3 - 5.0.0	Works as designed
VG5-714-ECE2	H.264, MJPEG	Yes	2/0	4.3 - 5.0.0	Works as designed
VG5-723-ECE2	H.264, MJPEG	Yes	2/0	4.3 - 5.0.0	Works as designed
VG5-724-ECE2	H.264, MJPEG	Yes	2/0	4.3 - 5.0.0	Works as designed
VG4 AutoDome Series (Supported Firmware v5.72)					
VG4-100 Series	H.264, MJPEG	Yes	2/0	4.4 - 5.0.0	Works as designed
VG4-200 Series	H.264, MJPEG	Yes	2/0	4.4 - 5.0.0	Works as designed
VG4-300 Series	H.264, MJPEG	Yes	2/0	4.4 - 5.0.0	Works as designed
VG4-500i Series	H.264, MJPEG	Yes	2/0	4.4 - 5.0.0	Works as designed
MIC Series (Supported Firmware v25500593)					
MIC-IP-IP-Dynamic-7000-HD	H.264, MJPEG	No	4/0	4.8.0 - 5.0.0	Tested & Certified
Dinion IP (Supported Firmware v90500592)					
Dinion-IP-7000-HD	H.264, MJPEG	Yes	2/0	4.8.0 - 5.0.0	Tested & Certified
Encoder Series					
VIP-X1600 Series	H.264, MJPEG	Yes	4/0	5.0.0	Tested & Certified
VIDEOJET multi 4000	H.264, MJPEG	Yes	4/0	5.0.0	Works as designed
VIP X1 XF Series	H.264, MJPEG	Yes	2/0	5.0.0	Tested & Certified
Generic					
All other models	Dual Stream (H.264, MJPEG, MPEG4)	Yes	DPC*	4.4 - 5.0.0	Works as designed

* DPC - depends on camera capability

VideoEdge camera handler is fully integrated with the CBC megapixel cameras. CBC cameras operating system (firmware) is continually evolving; please make sure your camera is running the most current firmware available. Supported CBC Cameras:

Model	CODEC Supported	Audio	I/O	VideoEdge Versions Supported	Certification
Fixed IP Cameras					
MP1A	MJPEG	No	0/0	4.0.1 - 5.0.0	Works as designed
MP1DN	H.264, MJPEG	No	0/0	4.0.1 - 5.0.0	Works as designed
MP2A	MJPEG	No	0/0	4.0.1 - 5.0.0	Tested & Certified
MP2DN	H.264, MJPEG	No	0/0	4.0.1 - 5.0.0	Works as designed
MP3DN	H.264, MJPEG	No	0/0	4.0.1 - 5.0.0	Tested & Certified
MP5A	MJPEG	No	0/0	4.0.1 - 5.0.0	Works as designed
MP5DN	H.264, MJPEG	No	0/0	4.0.1 - 5.0.0	Works as designed
Indoor Dome Cameras					
MP8D-L4	MJPEG	No	0/0	4.0.1 - 5.0.0	Works as designed
Generic					
All other models	Dual Stream (H.264+MJPEG)	Yes	DPC*	4.0.1 - 5.0.0	Works as designed

* DPC - depends on camera capability

This VideoEdge camera handler is fully integrated with the Dahua line of IP cameras. Dahua, generally, doesn't change the core API interface for their cameras. This VideoEdge camera handler is based on the Dahua core API package version DAHUA_HTTP_API_FOR_IPC_V1.30. As Dahua continue to release new cameras there may be instances where specific Dahua cameras are not listed in these release notes. A generic Dahua camera handler is available for these cameras.

Supported Dahua cameras:

Model	CODEC Supported	Audio	I/O	Edge Based Analytics	PTZ	VideoEdge Version Supported	Certification
Fixed Box & Bullet							
IPC-HF3500	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HF3301	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HF3300	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HF3200	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HF3101	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HF3100	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HF3110	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HFW3301C	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HFW3300	H.264, MJPEG	Yes	2/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HFW3300C	H.264, MJPEG	Yes	2/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HFW3200C	H.264, MJPEG	Yes	2/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HFW3200S	H.264, MJPEG	No	0/0	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HFW3101C	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HFW2100	H.264, MJPEG	No	0/0	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HFW3110	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HF81230E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HFW81230E-Z	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HF8630F	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HF8331E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HF8232F	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HF8231E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HFW8630E-Z	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HFW8331E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Based Analytics	PTZ	VideoEdge Version Supported	Certification
IPC-HFW8232E-Z	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HFW8231E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
IPC-HF5431E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Tested & Certified
IPC-HF5231E	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HFW5830E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
IPC-HFW5431E-Z	H264,MJPEG	No	2/0	Yes	Yes	5.0.0	Works as designed
IPC-HFW5231E-Z	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
IPC-HDW5830R-Z	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HDW5431R-Z	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HDW5231R-Z	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HFW4830E-S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW4431E-S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW4231E-S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW4431S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW4231S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Tested & Certified
IPC-HFW4431B-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HFW4231B-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HFW4431D-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HFW4231D-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HDW4830EM-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0	Works as designed
IPC-HDW4431EM-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0	Works as designed
IPC-HDW4231EM-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0	Works as designed
IPC-HDW4431M	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HDW4231M	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW2421R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW2421R-ZS-IRE6	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HFW2320R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW2320R-ZS-IRE6	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HFW2221R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW2221R-ZS-IRE6	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HFW2121R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Based Analytics	PTZ	VideoEdge Version Supported	Certification
IPC-HFW2121R-ZS-IRE6	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HDW2421R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HDW2320R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HDW2221R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HDW2121R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HFW1420S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW1320S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW1220S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HFW1120S	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
Dome							
IPC-HDB3301	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3301-DI	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3300	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3200	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3200-DI	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HD3200	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3200C	H.264, MJPEG	No	0/0	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3101	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3101-DI	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3100	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HD3100	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HD2100	H.264, MJPEG	No	0/0	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDB3110	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW3301	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW3301-DI	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW3300	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW3200	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW3200-DI	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDW3200	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDW3200S	H.264, MJPEG	No	0/0	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW3101	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Based Analytics	PTZ	VideoEdge Version Supported	Certification
IPC-HDBW3101-DI	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW3100	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDW3100	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDW2100	H.264, MJPEG	No	0/0	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW3110	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-HDBW81230E-Z	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-HDBW8630E-Z	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HDBW8331E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW8232E-Z	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HDBW8231E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW5830E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW5431E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW5231E-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW5830R-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW5431R-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW5231R-Z	H264,MJPEG	Yes	1/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW4830E-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HDBW4431E-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HDBW4231E-AS	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-HDBW4431F-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW4231F-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0	Works as designed
IPC-HDB4431C-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0	Works as designed
IPC-HDB4231C-AS	H264,MJPEG	Yes	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW2421R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW2421R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Tested & Certified
IPC-HDBW2320R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW2320R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW2221R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW2221R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
IPC-HDBW2121R-VFS	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW2121R-ZS	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Based Analytics	PTZ	VideoEdge Version Supported	Certification
IPC-HDBW1420E	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW1320E	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW1220E	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC-HDBW1120E	H264,MJPEG	No	0/0	Yes	No	5.0.0	Works as designed
IPC with Motorized Lens							
IPC-HFW3202C	H.264, MJPEG	Yes	1/1	Yes	Yes	4.4 – 5.0.0	Works as designed
IPC-HDB3202	H.264, MJPEG	Yes	1/1	Yes	Yes	4.4 – 5.0.0	Works as designed
IPC-HDB3202-DI	H.264, MJPEG	Yes	1/1	Yes	Yes	4.4 – 5.0.0	Works as designed
IPC-HDBW3202	H.264, MJPEG	Yes	1/1	Yes	Yes	4.4 – 5.0.0	Works as designed
IPC-HDBW3202-DI	H.264, MJPEG	Yes	1/1	Yes	Yes	4.4 – 5.0.0	Works as designed
Home-use IPC							
IPC-K100	H.264, MJPEG	No	0/0	Yes	No	4.4 – 5.0.0	Works as designed
IPC-K100A	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
IPC-K100W	H.264, MJPEG	Yes	1/1	Yes	No	4.4 – 5.0.0	Works as designed
PTZ							
SD6583A-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6582A-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6582C-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD3282D-GN	H.264, MJPEG	Yes	2/1	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6580-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6580C-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6380D-HN	H.264, MJPEG	Yes	2/1	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6983A-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6982C-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6982A-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6980C-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6980-HN	H.264, MJPEG	Yes	7/2	Yes	Yes	4.4 – 5.0.0	Works as designed
SD6AE830V-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD6AL830V-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD6AE230F-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Based Analytics	PTZ	VideoEdge Version Supported	Certification
SD6AL230F-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD65F230F-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD6AE240V-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD6C230U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD60230U-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD60225U-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD60131U-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD60230U-HNI-SL	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD59230U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD59225U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD59131U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD50230U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD50225U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD50131U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD52C230U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD52C225U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD52C131U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD6C430U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD60430U-HNI	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
SD59430U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Tested & Certified
SD50430U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD52C430U-HNI	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD49225T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD49220T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD49212T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD40212T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD42212T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD42C212T-HN	H264,MJPEG	Yes	2/0	Yes	Yes	5.0.0	Works as designed
SD29204T-GN	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0	Works as designed
SD22204T-GN	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed
SD22204T-GN-W	H264,MJPEG	No	0/0	Yes	Yes	5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	Edge Based Analytics	PTZ	VideoEdge Version Supported	Certification
SD29204T-GN-W	H264,MJPEG	Yes	0/0	Yes	Yes	5.0.0	Works as designed
PTZ12230F-IRB-N	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
PTZ12240-IRB-N	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
PTZ12230F-LR8-N	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
PTZ12240-LR8-N	H264,MJPEG	Yes	7/0	Yes	Yes	5.0.0	Works as designed
Panoramic							
IPC-EBW81230P	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Tested & Certified
IPC-PFW8601-A180	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-EBW81200	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-EBW8600	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-EBW8600-IVC	H264,MJPEG	Yes	2/0	Yes	No	5.0.0	Works as designed
IPC-EB5500	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
IPC-EB5400	H264,MJPEG	Yes	1/0	Yes	No	5.0.0	Works as designed
Encoder							
NVS0104HDC	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0	Tested & Certified
NVS0204HDC	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0	Works as designed
NVS0404HDC	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0	Works as designed
NVS0404HDC-A-F	H264,MJPEG	Yes	8/0	Yes	Yes	5.0.0	Works as designed
NVS0804HDC-A-F	H264,MJPEG	Yes	8/0	Yes	Yes	5.0.0	Works as designed
NVS1604HF-A-E	H264,MJPEG	Yes	16/0	Yes	Yes	5.0.0	Works as designed
NVS0804HF-A-E	H264,MJPEG	Yes	16/0	Yes	Yes	5.0.0	Works as designed
NVS0404HF-A-E	H264,MJPEG	Yes	16/0	Yes	Yes	5.0.0	Works as designed
NVS0404HE-AS	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0	Works as designed
NVS0204HE-AS	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0	Works as designed
NVS0104HE-AS	H264,MJPEG	Yes	4/0	Yes	Yes	5.0.0	Works as designed
NVS1604HDC-A	H264,MJPEG	Yes	16/0	Yes	Yes	5.0.0	Works as designed
NVS0804HDC-A	H264,MJPEG	Yes	8/0	Yes	Yes	5.0.0	Works as designed
NVS0404HDC-A	H264,MJPEG	Yes	8/0	Yes	Yes	5.0.0	Works as designed
Generic							
All other models	H264, MJPEG	DPC*	DPC*	Yes	No	4.4 – 5.0.0	Works as designed

* DPC - Depends on camera capability

This VideoEdge camera handler is fully integrated with the exacqVision line of IP cameras. exacqVision, generally, doesn't change the core API interface for their cameras. This VideoEdge camera handler is based on the exacqVision core API package version "IP Media Device Management Protocol User Guide Version 2.0." As exacqVision continue to release new cameras there may be instances where specific exacqVision cameras are not listed in these release notes. A generic exacqVision camera handler is available for these unlisted cameras provided it supports the exacqVision CGI interface.

Supported exacqVision cameras:

Model	CODEC Supported	Audio	I/O	VideoEdge Versions Supported	Certification
Encoders					
E-ADE1C	H.264, MJPEG, MP4V	Yes	1/0	4.5.1 - 5.0.0	Tested & Certified
E-ADE4C	H.264, MJPEG, MP4V	Yes	4/0	4.5.1 - 5.0.0	Tested & Certified
Generic					
All other models	Model Dependent [1]			4.5.1 - 5.0.0	Works as designed

Note:

Generic model is fully featured for unlisted models supporting dual video streaming, audio stream, PTZ, dry contact events and query device to discover camera capabilities. For specific models, the handler dynamically queries the capabilities from the camera.

In this release the VideoEdge camera pack is fully integrated with FLIR's D, PT, F and FC series, multi sensor, pan tilt and fixed thermal security cameras.

The following cameras are supported with minimum camera firmware version *nexus-server-GD_v2.5.9.1* for *F, PT and D series*.

The following cameras are supported with minimum camera firmware version *nexus-server-GD_v2.5.27.9* for *FC-S and FC-R series*.

Supported FLIR cameras:

Model	CODEC Supported	Audio	I/O	VideoEdge Versions Supported	Certification
Fixed Cameras					
F-112	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-117	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-124	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-304	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-307	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-313	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-324	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Tested & Certified
F-334	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-348	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-606	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-610	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-612	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-618	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-625	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-645	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
F-VIS	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
Outdoor Dome Cameras					
D-313	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
D-324	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Tested & Certified
D-334	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
D-348	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	VideoEdge Versions Supported	Certification
D-618	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
D-625	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
D-645	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
Multi-Sensor Pan Tilt Cameras					
PT-112	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-117	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-124	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-304	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-307	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-313	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-324	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Tested & Certified
PT-334	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-348	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-602CZ	H.264, MJPEG	No	0/0	5.0.0	Tested & Certified
PT-606	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-610	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-612	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-618	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-625	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-645	H.264, MJPEG, MPEG4	No	0/0	4.1 - 5.0.0	Works as designed
PT-644 HD	H.264, MJPEG	No	0/0	5.0.0	Works as designed
PT-625 HD	H.264, MJPEG	No	0/0	5.0.0	Works as designed
PT-617 HD	H.264, MJPEG	No	0/0	5.0.0	Works as designed
PT-612 HD	H.264, MJPEG	No	0/0	5.0.0	Works as designed
PT-608 HD	H.264, MJPEG	No	0/0	5.0.0	Works as designed
PT-606Z HD	H.264, MJPEG	No	0/0	5.0.0	Works as designed
A310pt	H.264, MJPEG, MPEG4	No	0/0	5.0.0	Tested & Certified
Thermal Cameras					
FC-334-S	H.264, MJPEG, MPEG4	No	0/0	4.8.0 - 5.0.0	Tested & Certified
FC-324-R	H.264, MJPEG, MPEG4	No	0/0	4.8.0 - 5.0.0	Tested & Certified
FC-XXX-S	H.264, MJPEG, MPEG4	No	0/0	4.8.0 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	VideoEdge Versions Supported	Certification
FC-XXX-S	H.264, MJPEG, MPEG4	No	0/0	4.8.0 - 5.0.0	Works as designed
FC-304 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-305 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-309 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-313 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-317 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-324 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-332 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-344 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-371 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-608 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-610 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-617 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-625 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-632 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-644 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Tested & Certified
FC-669 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
FC-690 ID	H.264, MJPEG, MPEG4	No	1/0	5.0.0	Works as designed
Generic					
All other models	N/A	No	No	No	N/A

This VideoEdge camera handler is fully integrated with the Hikvision line of IP cameras. Hikvision, generally, doesn't change the core API interface for their cameras. This VideoEdge camera handler is based on the Hikvision core API package version "IP Media Device Management Protocol User Guide Version 2.0." As Hikvision continue to release new cameras there may be instances where specific Hikvision cameras are not listed in these release notes. A generic Hikvision camera handler is available for these unlisted cameras provided it supports the Hikvision CGI interface.

Supported Hikvision cameras:

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Analytics	VideoEdge Versions Supported	Certification
Fixed Cameras							
DS-2CD2132F-I(W)(S)	H.264, MJPEG, MP4V	Yes	1/0	No	Yes	4.6 – 5.0	Tested & Certified
DS-2CD4132FWD-IZ	H.264, MJPEG, MP4V	Yes	1/0	No	Yes	4.6 – 5.0	Tested & Certified
DS-2CD2120F-IWS	H.264, MJPEG	Yes	1/0	No	Yes	4.6 – 5.0	Tested & Certified
DS-2CD4135F-IZ	H.264, MJPEG	Yes	1/0	No	Yes	4.6 – 5.0	Tested & Certified
DS-2CD753F-E(I)	H.264, MJPEG	Yes	1/0	No	Yes	4.6 – 5.0	Works as designed
DS-2CD853F-E(W)	H.264, MJPEG	Yes	1/0	No	Yes	4.6 – 5.0	Works as designed
DS-2CD793PF(NF)-E(I)	H.264, MJPEG	Yes	1/0	No	Yes	4.6 – 5.0	Works as designed
DS-2CD7264FWD-E(I) Z(H)(S)	H.264, MJPEG	N	0/0	No	Yes	4.6 – 5.0	Works as designed
DS-2CD2H55FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Tested & Certified
DS-2CD2025FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2035FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2055FWD-I	H264, MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2085FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2025FHWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2125FWD-I(S) [2]	H264, MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2125FWD-IM	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2135FWD-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2155FWD-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2185FWD-I	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2125FHWD-I (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Analytics	VideoEdge Versions Supported	Certification
DS-2CD2325FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2335FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2355FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2385FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2325FHWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2T25FWD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2T35FWD-I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2T55FWD-I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2T85FWD-I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2T25FHWD-I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2625FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2635FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2655FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2685FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2725FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2735FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2755FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Tested & Certified
DS-2CD2785FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2H25FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2H35FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2H85FWD-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2935FWD-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2955FWD-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2023G0-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2043G0-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2123G0-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2143G0-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2323G0-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2343G0-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Analytics	VideoEdge Versions Supported	Certification
DS-2CD2623G0-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2643G0-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2723G0-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2743G0-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2H23G0-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2H43G0-IZS	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2622FWD-IZS	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0	Tested & Certified
DS-2CD2622FWD-I(S) (Z) [2]	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2F22FWD-I(W) (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2F42FWD-I(W) (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2F52F-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2T22WD-I3/I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2T42WD-I3/I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2T52-I3/I5/I8	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2022WD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2042WD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2052-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2122FWD-I(W) (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2142FWD-I(W) (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2152F-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2322WD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2342WD-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2352-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2422FWD-IW	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2442FWD-IW	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Tested & Certified
DS-2CD2452F-IW	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2522FWD-I(W) (S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Analytics	VideoEdge Versions Supported	Certification
DS-2CD2542FWD-I(W)(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2552F-I(S) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2642FWD-I(S)(Z) [2]	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2652F-I(S)(Z) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2722FWD-I(S)(Z) [2]	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2742FWD-I(S)(Z) [2]	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2752F-I(S)(Z) [2]	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD2412FWD-IW	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD6414FWD-10/20/30	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2CD6424FWD-10/20/30	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed
DS-2XM6612(D)FWD-I	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2XM6622(D)FWD-I	H264,MJPEG	Yes	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1031-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1041-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1131-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1141-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1331-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1341-I	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1631FWD-I(Z)	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1641FWD-I(Z)	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1731FWD-I(Z)	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1741FWD-I(Z)	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1H31WD-IZ	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
DS-2CD1H41WD-IZ	H264,MJPEG	No	0/0	No	Yes	4.8 – 5.0	Works as designed
Thermal Cameras							
DS-2TD2136T-15	H264,MJPEG	Yes	2/2	No	Yes	4.8 – 5.0	Tested & Certified
DS-2TD2136(T)	H264,MJPEG	Yes	1/1	No	Yes	4.8 – 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Analytics	VideoEdge Versions Supported	Certification
DS-2TD2166(T)	H.264,MJPEG, MPEG4	Yes	2/2	No	Yes	4.8 – 5.0	Works as designed
DS-2TD2336	H264,MJPEG	Yes	2/2	No	Yes	4.8 – 5.0	Works as designed
DS-2TD2366	H264,MJPEG	Yes	2/2	No	Yes	4.8 – 5.0	Works as designed
DS-2TD4136	H.264,MJPEG, MPEG4	Yes	7/2	Yes	Yes	4.8 – 5.0	Works as designed
DS-2TD4166	H.264,MJPEG, MPEG4	Yes	7/2	Yes	Yes	4.8 – 5.0	Works as designed
People Counting Camera							
iDS-2CD6810F/C	H264	No	1/1	No	No	4.8 – 5.0	Tested & Certified
iDS-2CD6810F-IV/C	H264	No	1/1	No	No	4.8 – 5.0	Works as designed
Fisheyes							
DS-2CD6362F-IVS	H.264, MJPEG	Yes	1/0	No	Yes	4.6 – 5.0	Tested & Certified
SpeedDome							
DS-2DF5284-A	H.264, MJPEG, MP4V	Yes	7/0	Yes	Yes	4.6 – 5.0	Tested & Certified
Encoder							
DS-6701HFI	H.264, MJPEG, MP4V	Yes	1/0	Yes	Yes	4.6 – 5.0	Tested & Certified
DS-6704HFI	H.264, MJPEG, MP4V	Yes	4/0	Yes	Yes	4.6 – 5.0	Tested & Certified
DS-6708HFI	H.264, MJPEG, MP4V	Yes	8/0	Yes	Yes	4.6 – 5.0	Works as designed
Generic							
Generic camera	Model Dependent					4.6 – 5.0	Works as designed

Note:

¹ Generic models are fully featured for unlisted models supporting video stream, audio stream, PTZ, dry contact events, Edge Based motion and query device to discover camera capabilities. For specific models, the handler dynamically queries the capabilities from the camera.

Manufacture & Model	Codec Supported	Audio	I/O	PTZ Supported	Edge Motion Detection Supported	VideoEdge Version Supported	Certification
Hikvision							
Hikvision DS-2DF5274-A	H.264, MJPEG	Yes	Yes	Yes	No	4.4 - 5.0.0	Tested & Certified
Hikvision DS-2CD2012-I	H.264, MJPEG	No	0/0	No	No	4.4 - 5.0.0	Tested & Certified
View Z							
ViewZ VZ-PVM-I2W1	H.264, MJPEG	No	0/0	No	No	4.5.1 - 5.0.0	Tested & Certified
ViewZ VZ-215D2IP	H.264, MJPEG	No	0/0	No	No	4.5.1 - 5.0.0	Tested & Certified
3S							
3S N9071	H264, MJPEG	Yes	0/0	No	No	4.6 - 5.0.0	Tested & Certified
Ganz							
Ganz ZN-M2AF	H264, MJPEG	No	0/0	No	No	4.6 - 5.0.0	Tested & Certified
Truen							
Encoder TCS3000	H264, MJPEG	DPC*	DPC*	DPC*	No	4.6 - 5.0.0	Tested & Certified
Vision 360							
**Predator HD	H264, MJPEG, MPEG4	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
Canon							
Canon VB-H43	H264, MJPEG	Yes	No	Yes	No	4.6 - 5.0.0	Tested & Certified
Redvision							
RVX-IP30-IRWL-W	H264, MJPEG, MPEG4	No	No	Yes	No	4.6 - 5.0.0	Tested & Certified
Avigilon							
1.0MP 1.0-H3-FD1	H264, MJPEG	Yes	No	Yes*	No	4.6 - 5.0.0	Tested & Certified
2.0MP 2.0-H3-D!	H264, MJPEG	Yes	No	Yes*	No	4.6 - 5.0.0	Tested & Certified
2.0W-H3PTZ-DP20 (510103)	H264, MJPEG	Yes	No	Yes*	No	4.7 - 5.0.0	Tested & Certified
2.0-H3-DO1-IR(513228)	H264, MJPEG	Yes	No	Yes*	No	4.7 - 5.0.0	Tested & Certified
2.0-H3M-DO1(510587)	H264, MJPEG	Yes	No	Yes*	No	4.7 - 5.0.0	Tested & Certified

Manufacture & Model	Codec Supported	Audio	I/O	PTZ Supported	Edge Motion Detection Supported	VideoEdge Version Supported	Certification
5.0-H3-D1-IR(473461)	H264, MJPEG	Yes	No	Yes*	No	4.7 - 5.0.0	Tested & Certified
3.0W-H3-D1	H264, MJPEG	Yes	No	Yes*	No	4.7 - 5.0.0	Tested & Certified
3.0C-H3A-BO1-IR	H264, MJPEG	Yes	No	Yes*	No	4.7 - 5.0.0	Tested & Certified
Digital Watchdog							
DWC-MF21M4TIR	H264, MJPEG, MPEG4	No	No	No	No	4.6 - 5.0.0	Tested & Certified
DWC-MV421D	H264, MJPEG, MPEG4	Yes	No	No	No	4.6 - 5.0.0	Tested & Certified
Sony 6th Gen***							
SNC-EB632R	H264, MJPEG	No	0/0	No	No	4.0 - 5.0.0	Tested & Certified
SNC-EM630	H264, MJPEG	No	0/0	No	No	4.0 - 5.0.0	Tested & Certified
SNC-VM602R	H264, MJPEG	Yes	0/0	No	No	4.0 - 5.0.0	Tested & Certified
SNC-WR600	H264, MJPEG	Yes	0/0	Yes	No	4.0 - 5.0.0	Tested & Certified
SNC-EM632RC	H264, MJPEG	No	0/0	No	No	4.0 - 5.0.0	Tested & Certified
FLIR							
TCX-T4-332ZU	H264, MJPEG	No	0/0	Yes	No	4.8.1-5.0	Tested & Certified

*DPC- Depend on camera capability

**Predator HD Camera firmware must be PREDATOR_HD_1_16_03 and above for the listed features to work

*** Please contact support on the use of these cameras.

VideoEdge camera handler is fully integrated with the Panasonic line of IP cameras. Panasonic, generally, doesn't change the core API interface for their cameras. VideoEdge camera handler is based on Panasonic core API package version 1.28, supporting both WV and DG versions of the listed cameras. As Panasonic continues to release new cameras there may be instances where specific Panasonic cameras are not listed in the available camera pack. A generic Panasonic camera handler is available for these cameras.

Supported Panasonic cameras and encoders:

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
GXE500	H.264, MJPEG, MPEG4	Yes	3/0	No	No	No	4.3 - 5.0	Tested & Certified
NW484	MJPEG, MPEG4	No	1/0	No	No	No	4.0.1 - 5.0	Tested & Certified
NW484S	MJPEG, MPEG4	No	1/0	No	No	No	4.0.1 - 5.0	Works as designed
NW502S	H.264, MJPEG, MPEG4	Yes	3/0	No	No	No	4.0.1 - 5.0	Works as designed
SF332	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Works as designed
SF335	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Tested & Certified
SF336	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Tested & Certified
SF342	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Works as designed
SF346	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Works as designed
SW352	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.1 - 5.0	Works as designed
SW355	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Works as designed
NF284	MJPEG, MPEG4	Yes	1/0	No	No	No	4.1 - 5.0	Tested & Certified
NF302	MJPEG, MPEG4	Yes	1/0	No	No	No	4.1 - 5.0	Tested & Certified
SP508	H.264, MJPEG	No	3/0	No	No	No	4.3 - 5.0	Works as designed
SF538	H.264, MJPEG	No	3/0	No	No	No	4.3 - 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
SF548	H.264, MJPEG	No	3/0	No	No	No	4.3 - 5.0	Works as designed
SW558	H.264, MJPEG	No	3/0	No	No	No	4.3 - 5.0	Works as designed
SP509	H.264, MJPEG	Yes	3/0	No	No	No	4.3 - 5.0	Works as designed
SF539	H.264, MJPEG	Yes	3/0	No	No	No	4.3 - 5.0	Works as designed
SF549	H.264, MJPEG	Yes	3/0	No	No	No	4.3 - 5.0	Works as designed
SW559	H.264, MJPEG	Yes	3/0	No	No	No	4.3 - 5.0	Tested & Certified
SW152	H.264, MJPEG	No	0/0	No	No	No	4.3 - 5.0	Tested & Certified
SW155	H.264, MJPEG	No	0/0	No	No	No	4.3 - 5.0	Works as designed
SF132	H.264, MJPEG	No	0/0	No	No	No	4.3 - 5.0	Works as designed
SF135	H.264, MJPEG	No	0/0	No	No	No	4.3 - 5.0	Works as designed
NW960	MJPEG, MPEG4	Yes	3/0	Yes	No	No	4.0.1 - 5.0	Works as designed
NW964	MJPEG, MPEG4	Yes	3/0	Yes	No	No	4.0.1 - 5.0	Tested & Certified
NS950	MJPEG, MPEG4	Yes	3/0	Yes	No	No	4.0.1 - 5.0	Tested & Certified
NS954	MJPEG, MPEG4	Yes	3/0	Yes	No	No	4.0.1 - 5.0	Works as designed
NS202	MJPEG, MPEG4	Yes	1/0	Yes	No	No	4.0.1 - 5.0	Works as designed
NS202A	MJPEG, MPEG4	Yes	1/0	Yes	No	No	4.0.1 - 5.0	Tested & Certified
SC384	H.264, MJPEG, MPEG4	Yes	3/0	Yes	No	No	4.1 - 5.0	Works as designed
SC385	H.264, MJPEG, MPEG4	Yes	3/0	Yes	No	No	4.0.1 - 5.0	Tested & Certified
SC395	H.264, MJPEG, MPEG4	Yes	3/0	Yes	No	No	4.0.1 - 5.0	Works as designed
SC386	H.264, MJPEG, MPEG4	Yes	3/0	Yes	No	No	4.3 - 5.0	Tested & Certified
SC396	H.264, MJPEG	Yes	3/0	Yes	No	No	4.3 - 5.0	Works as designed
ST162	H.264, MJPEG	Yes	1/0	Yes	No	No	4.3 - 5.0	Works as

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
								designed
ST165	H.264, MJPEG	Yes	1/0	Yes	No	No	4.3 - 5.0	Tested & Certified
SW172	H.264, MJPEG	Yes	1/0	Yes	No	No	4.3 - 5.0	Works as designed
SW174W	H.264, MJPEG	Yes	1/0	Yes	No	No	4.3 - 5.0	Works as designed
SW175	H.264, MJPEG	Yes	1/0	Yes	No	No	4.3 - 5.0	Works as designed
NP244	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Tested & Certified
NP304	MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Tested & Certified
NP502	H.264, MJPEG, MPEG4	Yes	3/0	No	No	No	4.0.1 - 5.0.	Tested & Certified
SP102	H.264, MJPEG	No	0/0	No	No	No	4.0.1 - 5.0	Tested & Certified
SP105	H.264, MJPEG	No	0/0	No	No	No	4.0.1 - 5.0	Tested & Certified
SP302	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.1 - 5.0	Works as designed
SP305	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Tested & Certified
SP306	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.0.1 - 5.0	Tested & Certified
SP304	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.3 - 5.0	Works as designed
SF334	H.264, MJPEG, MPEG4	Yes	1.0	No	No	No	4.3 - 5.0	Works as designed
SW314	H.264, MJPEG, MPEG4	No	1/0	No	No	No	4.3 - 5.0	Works as designed
SW316	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.3 - 5.0	Works as designed
SW316L	H.264, MJPEG, MPEG4	Yes	1/0	No	No	No	4.3 - 5.0	Tested & Certified
WV-S1132	H.264, MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1131	H.264, MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1112	H.264, MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1111	H.264, MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
WV-S1130V	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1130VRJ	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1110V	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1110VRJ	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2130	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2110	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1510	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2531	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2531LN	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2531LTN	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2231L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1531	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1531LN	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1531LNJ	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1531LTN	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S1531LTNJ	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2131L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Tested & Certified
WV-S1511	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2511LN	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-S2211L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
WV-S2111L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-V2530L	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-V1330L	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-V1170	H.264,MJPEG	Yes	2/1	Yes	Yes	No	4.9- 5.0	Works as designed
NT304/NT314	MPEG4,MJPEG	Yes	2/1	Yes	Yes	No	4.9- 5.0	Works as designed
GXE100	H264,MJPEG	NA	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
DG-NF282	MPEG4,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
NP1000	MPEG4,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
NP1004	MPEG4,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
DG-SF334	H264,MJPEG,MPEG4	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SW115	H.264,MJPEG	NA	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
BL-VP104	H264,MJPEG	NA	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
BL-VP104W	H264,MJPEG	NA	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
BL-VP101	H264,MJPEG	NA	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SW158	H264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SF138	H264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV781L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPV781L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV631L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV631LT	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
WV-SFN631L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFR631L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV611L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN611L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFR611L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPN631	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPN611	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPW631L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPW611	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPN531	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV531	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFR531	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN531	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPW531AL	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPW532	H264,MJPEG	NA	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPW511AL	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPW310	H.264,MJPEG	NA	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPW312L	H.264,MJPEG	NA	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN310	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPN310	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
WV-SFV310	H264,MJPEG	NA	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFR310	H264,MJPEG	NA	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN311L	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV311	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN311	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFR311	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPN311	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPN310	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV311A	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFR311A	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN311A	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN310A	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPN311A	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPN310A	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SPW311AL	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SW598	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Tested & Certified
WV-SW598J	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SC588	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SUD638	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SW397	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
WV-SW397B	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SW397BJ	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SW397BH	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SW397A	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SW397AJ	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SW397AH	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SW397J	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SW397H	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SC387	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SC387A	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SC387H	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
BL-VT164	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
BL-VT164W	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-X6531N	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-X6531NJ	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-X6511N	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-X6511NJ	H.264,MJPEG	Yes	3/1	Yes	Yes	Yes	4.9- 5.0	Works as designed
WV-SFV130	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN130	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV130M	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
WV-SFV110	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN110	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV110M	H.264,MJPEG	Yes	0/0	Yes	Yes	No	4.9- 5.0	Works as designed
SW458	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
SF438	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Tested & Certified
WV-SF448	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFV481	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Works as designed
WV-SFN480	H.264,MJPEG	Yes	3/1	Yes	Yes	No	4.9- 5.0	Tested & Certified
Generic								
All other models	Single Stream (H.264, MJPEG, MPEG4)	DPC*	DPC*	DPC*	DPC*	DPC*	4.3 - 4.9	Works as designed

* DPC - depends on camera capability

This VideoEdge camera handler is fully integrated with the Pelco line of IP cameras. Pelco, generally, doesn't change the core API interface for their cameras. This VideoEdge camera handler is based on the Pelco API released on July 31, 2013. As Pelco continue to release new cameras there may be instances where specific Pelco cameras are not listed in these release notes.

Pelco camera handler will get the camera capability dynamically when the specific camera is being added to VideoEdge, and determine whether the specific camera is supported or not. If the camera is supported, it will be added to VideoEdge successfully.

Supported Pelco cameras:

Model Series	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Meta data Supported	VideoEdge Versions Supported
Box							
IL10	H.264	No	DPC*	No	No	No	4.4 - 5.0
IXS0	H.264, MJPEG, MPEG4	Yes	DPC*	No	Yes	No	4.4 - 5.0
IXES1 (Enh)	H.264, MJPEG, MPEG4	Yes	DPC*	No	Yes	No	4.4 - 5.0
IX10	H.264, MJPEG	No	DPC*	No	Yes	No	4.4 - 5.0
IXE10	H.264, MJPEG	No	DPC*	No	Yes	No	4.4 - 5.0
IXE11 (Enh)	H.264, MJPEG, MPEG4	Yes	DPC*	No	Yes	No	4.4 - 5.0
IXE20	H.264, MJPEG	No	DPC*	No	Yes	No	4.4 - 5.0
IXE21 (Enh)	H.264, MJPEG, MPEG4	Yes	DPC*	No	Yes	No	4.4 - 5.0
IX30	H.264, MJPEG	No	DPC*	No	Yes	No	4.4 - 5.0
IXE31 (Enh)	H.264, MJPEG, MPEG4	Yes	DPC*	No	Yes	No	4.4 - 5.0
IXE12	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXE22	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXE32	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXES1	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXE11	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXE21	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXE31	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXPS1	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXP11	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
IXP21	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0

Model Series	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Meta data Supported	VideoEdge Versions Supported
IXP31	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IXP51	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
Bullet							
IBP Series	H.264, MJPEG	DPC*	DPC*	No	Yes	No	4.4 - 5.0
IBPS110	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IBP1110	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IBP219	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IBP319	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IBP519	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IBE129	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IBE229	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IBE329	H264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
Dome							
IDS0	H.264, MJPEG	DPC*	DPC*	No	Yes	No	4.4 - 5.0
ID10	H.264, MJPEG	DPC*	DPC*	No	Yes	No	4.4 - 5.0
IDE10	H.264, MJPEG	DPC*	DPC*	No	Yes	No	4.4 - 5.0
IDE20	H.264, MJPEG	DPC*	DPC*	No	Yes	No	4.4 - 5.0
IDE20-P	H.264, MJPEG	DPC*	DPC*	No	Yes	No	4.4 - 5.0
IDE20-OV	H.264, MJPEG	DPC*	DPC*	No	Yes	No	4.4 - 5.0
ID30	H.264, MJPEG	DPC*	DPC*	No	Yes	No	4.4 - 5.0
VR Dome							
IWP121	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IWP221	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
Micro Dome							
IJP121	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IJP221	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
Ruggedized							
IES0	H.264, MJPEG, MPEG4	Yes	DPC*	No	Yes	No	4.4 - 5.0
IE10	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0

Model Series	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Meta data Supported	VideoEdge Versions Supported
IE30	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IEE10	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IEE20	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IEE20-P	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IEE20-OV	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
EXF1230	H.264, MJPEG	No	4/0	No	Yes	No	4.8 – 5.0
Mini							
IMS0	H.264, MJPEG, MPEG4	Yes	DPC*	No	Yes	No	4.4 - 5.0
IMES1 (Enh)	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IM10	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IME11 (Enh)	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IME21 (Enh)	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IME31 (Enh)	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IMP	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
IMP121	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMP221	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMP321	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMP521	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMPS110	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMP1110	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMP219	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMP319	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMP519	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IME129	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IME229	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IME329	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMES19	H.264, MJPEG	Yes	1/0	No	No	No	4.8 – 5.0
IME119	H.264, MJPEG	Yes	1/0	No	No	No	4.8 – 5.0
IME219	H.264, MJPEG	Yes	1/0	No	No	No	4.8 – 5.0
IME319	H.264, MJPEG	Yes	1/0	No	No	No	4.8 – 5.0

Model Series	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Meta data Supported	VideoEdge Versions Supported
IME3122	H.264, MJPEG	Yes	1/0	No	No	No	4.8 – 5.0
PTZ							
Spectra H.264	H.264, MJPEG	Yes	DPC*	Yes	No	No	4.4 - 5.0
Spectra HD 720P	H.264, MJPEG	DPC*	DPC*	Yes	No	No	4.4 - 5.0
Spectra HD 1080P 20X	H.264, MJPEG	DPC*	DPC*	Yes	No	No	4.4 - 5.0
Spectra HD 1080P 30X	H.264, MJPEG	DPC*	DPC*	Yes	No	No	4.4 - 5.0
Excite IP	H.264, MJPEG	No	DPC*	Yes	No	No	4.4 - 5.0
S6220	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 – 5.0
S6230	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 – 5.0
S6220L	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 – 5.0
S6230L	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 – 5.0
S6220-US	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 – 5.0
S6230-US	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 – 5.0
P1220	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 – 5.0
ES523L	H.264, MJPEG	No	0/0	Yes	Yes	No	4.8 – 5.0
ES5230	H.264, MJPEG	No	0/0	Yes	Yes	No	4.8 – 5.0
EXP1230	H.264, MJPEG	No	4/0	Yes	Yes	No	4.8 – 5.0
Integrated PTZ							
Esprit SE IP	H.264, MJPEG	No	DPC*	Yes	No	No	4.4 - 5.0
Thermal							
TI3	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
TI6	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
Esprit TI3	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
Esprit TI6	H.264, MJPEG	Yes	DPC*	No	Yes	No	4.4 - 5.0
Panoramic (Multi Sensor Cameras)							
IMM12018	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMM12027	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
IMM12036	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
Encoder							

Model Series	CODEC Supported	Audio	I/O	PTZ Supported	Edge Based Motion Detection Supported	Edge Based Motion Meta data Supported	VideoEdge Versions Supported
NET5401T	H.264, MJPEG	No	1/0	Yes	No	No	4.4 - 5.0
NET5402T	H.264, MJPEG	No	DPC	Yes	No	No	4.4 - 5.0
NET5404T	H.264, MJPEG	No	DPC*	Yes	Yes	No	4.4 - 5.0
NET5501	H.264, MJPEG	No	0/0	No	Yes	No	4.9 - 5.0
NET5501-I	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
NET5501-XT	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 – 5.0
NET5504	H.264, MJPEG	Yes	4/0	No	Yes	No	4.8 – 5.0
NET5508	H.264, MJPEG	Yes	8/0	No	Yes	No	4.8 – 5.0
NET5516	H.264, MJPEG	Yes	16/0	No	Yes	No	4.8 – 5.0
NET5516T	H.264, MJPEG	Yes	16/0	No	Yes	No	4.8 – 5.0

*DPC - depends on camera capability

You can also find the information of supported Pelco camera series from below link:

<http://pdn.pelco.com/content/pelco-api-web-services-supported-pelco-products>

Note:

1. Some of the cameras with MPEG-4 format are not supported by Pelco handler though they may appear in the above Pelco developers' network link. For example, camera model series like IP3701 and encoder models like NET5301T are not supported because both of these device types don't support dynamic query of device capability.

VideoEdge camera handler is fully integrated with the Samsung communications line of IP. The VideoEdge is fully integrated with the cameras (with Samsung API TYPE1 and TYPE2 version 2.7.4). As Samsung continues to release new cameras to the market, the VideoEdge camera handler provides a generic Samsung camera driver that can connect to (compatible with Samsung API version 2.7.4) cameras.

Supported Samsung Cameras and Encoders:

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
Encoders							
SPE-100	H.264, MJPEG, MPEG4	Yes	1/0	Yes	Yes	No	4.2.1 - 5.0
SPE-400	H.264, MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.2.1 - 5.0
SPE-400B	H.264, MJPEG, MPEG4	No	0/0	Yes	Yes	No	4.4 - 5.0
SPE-101	H.264, MJPEG, MPEG4	No	0/0	Yes	Yes	No	4.4 - 5.0
SPE-1600	H.264, MJPEG, MPEG4	No	0/0	Yes	Yes	No	4.4 - 5.0
Box Series Cameras							
SNZ-5200	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNB-2000	H.264, MJPEG, MPEG4	Yes	2/0	No	Yes	No	4.2.1 - 5.0
SNB-3000	H.264, MJPEG, MPEG4	Yes	2/0	No	Yes	No	4.2.1 - 5.0
SNB-3002	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNB-5000	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNB-7000	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNB-5000A	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SNB-5001	H.264, MJPEG	No	1/0	No	Yes	No	4.4 - 5.0
SNB-7001	H.264, MJPEG	No	1/0	No	Yes	No	4.4 - 5.0
SNB-7002	H.264, MJPEG	Yes	1/0	No	Yes	No	4.4 - 5.0
SNB-6004	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SNB-6003	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SNB-5003	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNB-5004	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNB-6010B	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
SNB-6011B	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNB-7004	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNB-8000	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNB-9000	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNZ-6320	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNB-6004F	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNB-6005	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
XNB-6000	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNB-8000	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNB-6001	H.264,MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNB-6005	H.264,MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
Bullet Series Cameras							
SNO-5080R	H.264, MJPEG, MPEG4	No	1/0	No	Yes	No	4.2.1 - 5.0
SNO-7080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.4 - 5.0
SNO-7082R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SNO-6084R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SNO-5084R	H.264, MJPEG, MPEG4	No	1/0	No	Yes	No	4.8 - 5.0
SNO-6011	H.264, MJPEG, MPEG4	No	1/0	No	Yes	No	4.8 - 5.0
SNO-7084R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNO-8081R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNO-L5083R	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SNO-L6013R	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SNO-L6083R	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
PNO-9080R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
QNO-6010R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
QNO-6020R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
QNO-6030R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
QNO-6070R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
QNO-7010R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
QNO-7020R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
QNO-7030R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
QNO-7080R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
XNO-6080R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
XNO-8080R	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
Fixed Dome Series Cameras							
SNV-5010	H.264, MJPEG	No	0/0	No	Yes	No	4.2.1 - 5.0
SNV-3080	H.264, MJPEG, MPEG4	No	2/0	No	Yes	No	4.2.1 - 5.0
SNV-3120	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNV-5080	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNV-5080R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNV-7080	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNV-7080R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SNV-5084	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNV-5084R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNV-6012M	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SNV-6013	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SNV-6084R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNV-6085R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNV-7084R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNV-8080	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNV-8081R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SNV-L5083R	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SNV-L6013R	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SNV-L6083R	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SND-3080	H.264, MJPEG, MPEG4	No	2/0	No	Yes	No	4.2.1 - 5.0
SND-3082	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SND-3080F	H.264, MJPEG, MPEG4	No	2/0	No	Yes	No	4.2.1 - 5.0
SND-3080C	H.264, MJPEG, MPEG4	No	2/0	No	Yes	No	4.2.1 - 5.0
SND-3080CF	H.264, MJPEG, MPEG4	No	2/0	No	Yes	No	4.2.1 - 5.0
SND-5080	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
SND-5080F	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SND-7080	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SND-7080F	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.2.1 - 5.0
SND-1080	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-3082F	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-5011	H.264, MJPEG	No	1/0	No	Yes	No	4.4 - 5.0
SND-5061	H.264, MJPEG	No	1/0	No	Yes	No	4.4 - 5.0
SND-7011	H.264, MJPEG	No	1/0	No	Yes	No	4.4 - 5.0
SND-7061	H.264, MJPEG	No	1/0	No	Yes	No	4.4 - 5.0
SND-7082	H.264, MJPEG	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-7082F	H.264, MJPEG	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-6084	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-6083	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-6084R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-3082	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-7082	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-6084R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.4 - 5.0
SND-5083	H.264, MJPEG, MPEG4	No	1/0	No	Yes	No	4.8 - 5.0
SND-5084	H.264, MJPEG, MPEG4	No	1/0	No	Yes	No	4.8 - 5.0
SND-5084R	H.264, MJPEG, MPEG4	No	1/0	No	Yes	No	4.8 - 5.0
SND-6011R	H.264, MJPEG, MPEG4	No	1/0	No	Yes	No	4.8 - 5.0
SND-7084	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SND-7084R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SND-L5013	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SND-L5083	H.264, MJPEG, MPEG4	Yes	0/0	No	Yes	No	4.8 - 5.0
SND-L6012	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SND-L6013	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SND-L6013R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SND-L6083R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0
SND-L6083R	H.264, MJPEG, MPEG4	Yes	1/0	No	Yes	No	4.8 - 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
PND-9080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
PNM-9020V	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
PNV-9080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QND-6010R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QND-6020R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QND-6030R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QND-6070R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QND-7010R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QND-7020R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QND-7030R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QND-7080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QNV-6010R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QNV-6020R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QNV-6030R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QNV-6070R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QNV-7010R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QNV-7020R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QNV-7030R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
QNV-7080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-6010R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-6080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-6080	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-6080RV	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-6080V	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-8080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-8080RV	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6010	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6080	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-8080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
XND-6010	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-6011F	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-6085	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-6085V	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-8020F	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
XND-8030R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XND-8040R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNO-6020R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNO-6085R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNO-6120R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNO-8030R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNO-8040R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
SND-L5083R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
SNO-6085R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6010	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6011	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6020R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6085	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6120	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-6120R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-8020R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-8030R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-8040R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNV-8080R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
TNO-6320E	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
TNU-6320E	H.264, MJPEG	No	1/0	No	Yes	No	4.8 - 5.0
PTZ Series Cameras							
SNP-3120	H.264, MJPEG, MPEG4	Yes	2/0	Yes	No	No	4.2.1 - 5.0
SNP-3120V	H.264, MJPEG, MPEG4	No	0/0	Yes	No	No	4.2.1 - 5.0
SNP-3120VH	H.264, MJPEG, MPEG4	No	0/0	Yes	No	No	4.2.1 - 5.0

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
SNP-3371	H.264, MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.2.1 - 5.0
SNP-3302	H.264, MJPEG, MPEG4	No	4/0	Yes	Yes	No	4.2.1 - 5.0
SNP-3302H	H.264, MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.2.1 - 5.0
SNP-3371TH	H.264, MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.2.1 - 5.0
SNP-5200	H.264, MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.2.1 - 5.0
SNP-5200H	H.264, MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.2.1 - 5.0
SNP-3430H	H.264, MJPEG, MPEG4	Yes	0/0	Yes	Yes	No	4.2.1 - 5.0
SNP-3371H	H.264, MJPEG, MPEG4	Yes	4/0	Yes	Yes	No	4.4 - 5.0
SNP-6200	H.624, MJPEG	Yes	4/0	Yes	Yes	No	4.4 - 5.0
SNP-6200H	H.624, MJPEG	Yes	4/0	Yes	Yes	No	4.4 - 5.0
SNP-5300	H.624, MJPEG	Yes	4/0	Yes	Yes	No	4.4 - 5.0
SNP-5300H	H.624, MJPEG	Yes	4/0	Yes	Yes	No	4.4 - 5.0
SNP-5321	H.264, MPEG4	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-5321H	H.264, MPEG4	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-5430	H.264, MPEG4	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-5430H	H.264, MPEG4	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-6320RH	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-6321	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-6321H	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-L5233	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-L6233	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-L6233H	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 - 5.0
SNP-L6233RH	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 - 5.0
PNP-9200RH	H.264, MJPEG	Yes	4/0	Yes	Yes	No	4.8 - 5.0
XNP-6040H	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 - 5.0
XNP-6120H	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 - 5.0
XNP-6320	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 - 5.0
XNP-6320H	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 - 5.0
XNP-6320HS	H.264, MJPEG	Yes	1/0	Yes	Yes	No	4.8 - 5.0
Fisheye Cameras							

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported
PNF-9010R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
PNF-9010RV	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
PNF-9010RVM	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
SNF-8010	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
SNF-8010VM	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNF-8010R	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNF-8010RV	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNF-8010RVM	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
XNF-8010RV_RVM	H.264, MJPEG	Yes	1/0	No	Yes	No	4.8 - 5.0
L-series Cameras							
LND-6010R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LND-6020R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LND-6030R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LND-6070R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LNO-6010R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LNO-6020R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LNO-6030R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LNO-6070R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LNV-6010R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LNV-6020R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LNV-6030R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
LNV-6070R	H.264, MJPEG	Yes	0/0	No	Yes	No	4.8 - 5.0
Multi-channel Cameras							
PNM-7000VD	H.264, MJPEG	No	0/0	No	Yes	No	4.8 - 5.0
PNM-9080VQ	H.264, MJPEG	No	0/0	No	Yes	No	4.8 - 5.0
PNM-9081VQ	H.264, MJPEG	No	0/0	No	Yes	No	4.8 - 5.0
Generic							
All other models	Model dependent*	Yes*	Yes*	Yes*	Yes	No	4.2.1 - 5.0

* Generic model is full featured which support dual video streams, audio stream, PTZ, dry contact events, query device, Edge device motion detection, alarm out. For specific model, handler dynamic query capabilities from camera.

This version of VideoEdge camera handler provides full integration with the SONY line of Video Encoders and IP cameras. SONY has number of API's (Application Programming Interface) camera handlers to communicate with their cameras. The VideoEdge NVR is fully integrated with SONY's 3rd, 4th, 5th, and 6th generations of IP cameras. As SONY continues to release new cameras there can be instances where specific SONY cameras are not listed in the camera-list. A generic SONY camera handler is available in these instances.

Supported SONY cameras and encoders:

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
Encoders								
SNT-EX 101	H.264, MJPEG, MP4V	Yes	2/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNT-EX 101E	H.264, MJPEG, MP4V	Yes	2/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNT-EX 104	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNT-EP 104	H.264, MJPEG, MP4V	Yes	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNT-EP 154	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNT-EX 154	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
Fixed Cameras								
SNC-CS20	MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-CH160	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNC-CH140	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-CH240	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNC-CH180	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-CH280	H.264, MJPEG, MP4V	Yes	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-CH120	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-CH220	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
SNC-CH260	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-CM120	MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-CS50N	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNC-CS50P	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-CH110	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNC-CH210	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-EB520	H.264, MJPEG, MP4V	No	1/1	No	No	No	4.3 - 5.0.0	Tested & Certified
SNC-EM520	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.3 - 5.0.0	Works as designed
SNC-EM521	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.3 - 5.0.0	Works as designed
SNC-VB630	H.264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VB635	H.264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VB600	H.264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VB600B	H.264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VB632D	H.264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EB630	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EB632R	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EB602R	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EB630B	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-CX600	H.264, MJPEG	Yes	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Tested & Certified
SNC-CX600W	H.264, MJPEG	Yes	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EB600	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EB600B	H.264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
Mini Dome Cameras								
SNC-DH140	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH140T	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
SNC-DH240	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH240T	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH280	H.264, MJPEG, MP4V	Yes	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH120	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH120T	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH220T	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH160	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH260	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DS10	MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DS60	MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DM110	MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DM160	MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DF50N	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DF50P	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DF80N	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DF80P	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DF85N	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNCDF85P	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH220	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNC-DH110	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH110T	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
SNC-DH210	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNC-DH210T	H.264, MJPEG, MP4V	No	0/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-DH180	H.264, MJPEG, MP4V	Yes	1/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNC-VM600	H264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Tested & Certified
SNC-VM630	H264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VM631	H264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VM632R	H264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VM601	H264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VM602R	H264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VM600B	H264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VM601B	H264, MJPEG	Yes	2/2	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-VM772R	H264, MJPEG	Yes	2/2	No	Yes	Yes	5.0.0	Tested & Certified
SNC-EM632RC	H264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EM600	H264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EM630	H264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Tested & Certified
SNC-EM632R	H264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EM601	H264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-EM602RC	H264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-XM631	H264, MJPEG	No	1/1	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-XM632	H264, MJPEG	Yes	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Tested & Certified
SNC-XM636	H264, MJPEG	Yes	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-XM637	H264, MJPEG	No	0/0	No	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-HM662	H264, MJPEG	No	1/0	No	Yes	Yes	4.8.1 – 5.0.0	Tested & Certified
PTZ Dome								
SNC-RS44N	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RS44P	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RS84N	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
SNC-RS84P	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RS86N	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RS86P	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RH124	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Tested & Certified
SNC-RH164	H.264, MJPEG, MP4V	Yes	4/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RX530N	H.264, MJPEG, MP4V	Yes	2/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RX530P	H.264, MJPEG, MP4V	Yes	2/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RX550N	H.264, MJPEG, MP4V	Yes	2/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RX550P	H.264, MJPEG, MP4V	Yes	2/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RX570N	H.264, MJPEG, MP4V	Yes	2/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-RX570P	H.264, MJPEG, MP4V	Yes	2/0	No	No	No	4.0.1 - 5.0.0	Works as designed
SNC-EP550	H.264, MJPEG, MP4V	Yes	2/1	No	No	No	4.3 - 5.0.0	Works as designed
SNC-EP580	H.264, MJPEG, MP4V	Yes	2/1	No	No	No	4.3 - 5.0.0	Tested & Certified
SNC-ER250/ER521	H.264, MJPEG, MP4V	Yes	2/1	No	No	No	4.3 - 5.0.0	Tested & Certified
SNC-EP520/EP521	H.264, MJPEG, MP4V	Yes	2/1	No	No	No	4.3 - 5.0.0	Works as designed
SNC-ER550	H.264, MJPEG, MP4V	Yes	2/1	No	No	No	4.3 - 5.0.0	Works as designed
SNC-ER580	H.264, MJPEG, MP4V	Yes	2/1	No	No	No	4.3 - 5.0.0	Works as designed
SNC-WR630	H.264, MJPEG	Yes	4/2	Yes	Yes	Yes	4.8.1 – 5.0.0	Tested & Certified
SNC-WR632C	H.264, MJPEG	Yes	4/2	Yes	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-WR600	H.264, MJPEG	Yes	4/2	Yes	Yes	Yes	4.8.1 – 5.0.0	Works as designed
SNC-WR602C	H.264, MJPEG	Yes	4/2	Yes	Yes	Yes	4.8.1 – 5.0.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	Edge Based Motion Detection Supported	Edge Based Motion Detection Metadata	VideoEdge Versions Supported	Certification
Generic								
6th generation models	DPC*	DPC*	DPC*	DPC*	DPC*	DPC*	4.8.1 – 5.0.0	Works as designed
All other models	Dual Stream (H.262, MJPEG, MP4V)	No	0/0	No	No	No	4.3 - 5.0.0	Works as designed

VideoEdge camera handler is fully integrated with the Vivotek line of IP cameras. Vivotek generally doesn't change the core API interface for their cameras. VideoEdge camera handler is based on Vivotek API "URL Command Document for All Series Version 1.4a", supporting all the listed cameras. As Vivotek continues to release new cameras, there may be instances where specific Vivotek cameras are not listed in the supported camera list. A generic Vivotek camera handler is available for these cameras.

Supported Vivotek Cameras and Encoders:

Model	CODEC Supported	Audio	I/O	PTZ	VideoEdge Versions Supported	Certification
Encoders						
VS8801	H.264, MPEG4, MJPEG	Yes	8/0	No	4.3 - 5.0	Tested & Certified
Fisheye Cameras						
FE8171	H.264, MJPEG	Yes	1/0	No	4.3 - 5.0	Tested & Certified
FE8171V	H.264, MJPEG	Yes	1/0	No	4.3 - 5.0	Works as designed
FE8172	H.264, MJPEG	Yes	1/0	No	4.3 - 5.0	Tested & Certified
FE8172V	H.264, MJPEG	Yes	1/0	No	4.3 - 5.0	Works as designed
FE8174	H.264, MPEG4, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as designed
FE8174V	H.264, MPEG4, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as designed
FE8180	H.264, MJPEG	No	0/0	No	4.8.1 - 5.0	Works as designed
FE8181	H.264, MPEG4, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as designed
FE8181V	H.264, MPEG4, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as designed
FE8182	H.264, MJPEG	No	0/0	No	4.8.1 - 5.0	Works as designed
FE9181-H	H.264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Tested & Certified
FE9381-EHV	H.264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as designed
FE9182-H	H.264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as designed
AF5127	H.264, MJPEG	Yes	1/0	No	4.3 - 5.0	Works as designed
AF5127V	H.264, MJPEG	Yes	1/0	No	4.3 - 5.0	Works as designed
SF8172	H.264, MJPEG	Yes	1/0	No	4.3 - 5.0	Works as designed
SF8172V	H.264, MJPEG	Yes	1/0	No	4.3 - 5.0	Works as designed
Fixed Minidome Cameras						
FD8135H	H.264, MPEG4, MJPEG	Yes	3/0	No	4.3 - 5.0	Tested & Certified
FD8136	H.264, MPEG4, MJPEG	Yes	1/0	No	4.3 - 5.0	Works as designed
FD8136-F2	H.264, MPEG4, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as designed

Model	CODEC Supported	Audio	I/O	PTZ	VideoEdge Versions Supported	Certification
FD8137H	H.264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as designed
FD8137HV	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
FD8138-H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8152V-F2	H264, MJPEG	No	1/0	No	4.8.1 - 5.0	Works as Designed
FD8154-F2	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
FD8154V-F2	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
FD8155H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD816B-HF2	H264, MJPEG	Yes	1/2	No	4.8.1 - 5.0	Works as Designed
FD816B-HT	H264, MJPEG	Yes	1/2	No	4.8.1 - 5.0	Works as Designed
FD816C-HF2	H264, MJPEG	Yes	0/0	No	4.8.1 - 5.0	Works as Designed
FD8164-F2	H264, MJPEG	No	1/0	No	4.8.1 - 5.0	Works as Designed
FD8164V-F2	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
FD8165H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8166	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
FD8166A	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
FD8167	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8167A	H264, MJPEG	No	0/0	No	4.8.1 - 5.0	Works as Designed
FD8168	H264, MJPEG	Yes	0/0	No	4.8.1 - 5.0	Tested & Certified
FD8169	H264, MJPEG	Yes	0/0	No	4.8.1 - 5.0	Works as Designed
FD8169A	H264, MJPEG	No	0/0	No	4.8.1 - 5.0	Works as Designed
FD8171	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8173-H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Tested & Certified
FD8181	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8182-T	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8182-F2	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8335H	H264, MPEG4, MJPEG	Yes	3/1	No	4.3 - 5.0	Works as Designed
FD8338-HV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8355HV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8355EHV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Tested & Certified
FD836B-HTV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD836B-EHTV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed

Model	CODEC Supported	Audio	I/O	PTZ	VideoEdge Versions Supported	Certification
FD836B-HVF2	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD836B-EHVF2	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8365HV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8365EHV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8367-V	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Tested & Certified
FD8367-TV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Tested & Certified
FD8367A-V	H264, MJPEG	No	0/0	No	4.8.1 - 5.0	Works as Designed
FD8369A-V	H264, MJPEG	No	0/0	No	4.8.1 - 5.0	Tested & Certified
FD8371V	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8371EV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Tested & Certified
FD8373-HV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8373-EHV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8381-EV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8382-TV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8382-ETV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8382-VF2	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD8382-EVF2	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD9171-HT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD9181-HT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD9371-HTV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD9371-EHTV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD9381-HTV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
FD9381-EHTV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
Bullet Cameras						
IB8168	H264, MJPEG	No	0/0	No	4.8.1 - 5.0	Works as Designed
IB8338-H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8338-HR	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8354-C	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
IB8367	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8367A	H264, MJPEG	No	0/0	No	4.8.1 - 5.0	Works as Designed
IB8367-R	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed

Model	CODEC Supported	Audio	I/O	PTZ	VideoEdge Versions Supported	Certification
IB8367-RT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8367-T	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8369	H264, MJPEG	Yes	0/0	No	4.8.1 - 5.0	Works as Designed
IB8369A	H264, MJPEG	No	0/0	No	4.8.1 - 5.0	Works as Designed
IB836B-EHF3	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB836B-EHT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB836B-HF3	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB836B-HT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8373-EH	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8381	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8381-E	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8382-EF3	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8382-ET	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8382-F3	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB8382-T	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB9371-EHT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB9371-HT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB9381-EHT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IB9381-HT	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8130	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8130W	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8131	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8131W	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8155HP	H264, MJPEG	Yes	3/1	No	4.8.1 - 5.0	Works as Designed
IP8172	H264, MPEG4, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8172P	H264, MPEG4, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8336W	H264, MPEG4, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
IP8337H-C	H264, MJPEG	No	1/0	No	4.8.1 - 5.0	Works as Designed
IP8355EH	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8355H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8362	H264, MPEG4, MJPEG	Yes	1/1	No	4.3 - 5.0	Tested & Certified

Model	CODEC Supported	Audio	I/O	PTZ	VideoEdge Versions Supported	Certification
IP8365EH	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8365H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8371	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
IP8371E	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
Box Cameras						
IP816A-HP	H264, MJPEG	Yes	3/1	No	4.8.1 - 5.0	Works as Designed
IP816A-LPC	H264, MJPEG	Yes	3/1	No	4.8.1 - 5.0	Works as Designed
IP8165HP	H264, MJPEG	Yes	3/1	No	4.8.1 - 5.0	Works as Designed
IP8166	H264, MJPEG	Yes	3/1	No	4.8.1 - 5.0	Works as Designed
IP9171-HP	H264, MJPEG	Yes	3/1	No	4.8.1 - 5.0	Works as Designed
IP9181-H	H264, MJPEG	Yes	3/1	No	4.8.1 - 5.0	Works as Designed
Mini Box Cameras						
IP8152	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
IP8152-F4	H264, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
IP8173H	H264, MPEG4, MJPEG	Yes	1/0	No	4.8.1 - 5.0	Works as Designed
180 Panoramic Cameras						
CC8130	H264, MJPEG	Yes	0/0	No	4.8.1 - 5.0	Works as Designed
CC8370-HV	H264, MJPEG	Yes	0/0	No	4.8.1 - 5.0	Works as Designed
MS8391-EV	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Tested & Certified
Mobile Dome Cameras						
MD8531H	H264, MPEG4, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
MD8563-EH	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
MD8563-EHF2	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
PTZ Cameras						
SD8311E	H264, MPEG4, MJPEG	Yes	3/2	Yes	4.3 - 5.0	Works as Designed
SD8312E	H264, MPEG4, MJPEG	Yes	3/2	Yes	4.3 - 5.0	Works as Designed
SD8313E	H264, MPEG4, MJPEG	Yes	3/2	Yes	4.3 - 5.0	Tested & Certified
SD8321E	H264, MPEG4, MJPEG	Yes	3/2	Yes	4.3 - 5.0	Works as Designed
SD8322E	H264, MPEG4, MJPEG	Yes	3/2	Yes	4.3 - 5.0	Works as Designed
SD8323E	H264, MPEG4, MJPEG	Yes	3/2	Yes	4.3 - 5.0	Works as Designed

Model	CODEC Supported	Audio	I/O	PTZ	VideoEdge Versions Supported	Certification
SD8333-E	H264, MPEG4, MJPEG	Yes	4/2	Yes	4.8.1 - 5.0	Works as Designed
SD8362E	H264, MPEG4, MJPEG	Yes	3/2	Yes	4.3 - 5.0	Works as Designed
SD8363E	H264, MPEG4, MJPEG	Yes	4/2	Yes	4.8.1 - 5.0	Works as Designed
SD8364E	H264, MPEG4, MJPEG	Yes	4/2	Yes	4.8.1 - 5.0	Works as Designed
SD9161-H	H264, MJPEG	Yes	4/2	Yes	4.8.1 - 5.0	Tested & Certified
SD9361-EHL	H264, MJPEG	Yes	4/2	Yes	4.8.1 - 5.0	Works as Designed
SD9362-EH	H264, MJPEG	Yes	4/2	Yes	4.8.1 - 5.0	Works as Designed
SD9362-EHL	H264, MJPEG	Yes	4/2	Yes	4.8.1 - 5.0	Works as Designed
SD9364-EHL	H264, MJPEG	Yes	4/2	Yes	4.8.1 - 5.0	Works as Designed
PZ8111	H264, MPEG4, MJPEG	Yes	1/1	Yes	4.3 - 5.0	Tested & Certified
PZ8111W	H264, MPEG4, MJPEG	Yes	1/1	Yes	4.3 - 5.0	Works as Designed
PZ8121	H264, MPEG4, MJPEG	Yes	1/1	Yes	4.3 - 5.0	Works as Designed
PZ8121W	H264, MPEG4, MJPEG	Yes	1/1	Yes	4.3 - 5.0	Works as Designed
PD8136	H264, MPEG4, MJPEG	Yes	1/0	Yes (Pan Only)	4.8.1 - 5.0	Works as Designed
Split Type Camera Systems						
VC8101	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
VC8101_CU8161-H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
VC8101_CU8163-H	H264, MJPEG	Yes	1/1	No	4.8.1 - 5.0	Works as Designed
VC8201	H264, MJPEG	Yes	2/2	No	4.8.1 - 5.0	Tested & Certified
Generic						
All other models	Model Dependant	Generic Reduced Functionality	Generic Reduced Functionality	All other models	4.3 - 5.0	Model Dependent

Camera Specific Release Notes

This section is a collection of camera release notes as provided with each camera release. This section provides detailed description for each manufacturer cameras, performance limitations and supported features.

American Dynamics 8 Channel IP Encoder

Supported Key Functions

- Video Streaming – Single and Dual
- Video Codec – MJPEG, MPEG4 and H.264
- Audio Streaming – Audio Codec's are AAC, G.711 ulaw and G.711 alaw
- PTZ – Applies to analog cameras that have mechanical Pan, Tilt, and Optical Zoom
- Dry Contact Events – Camera is polled for dry contact event at 100ms interval
- Reset to Factory Defaults
- Query Device
- Reboot Device
- Bitrate control now supported – VBR provides a quality drop down range and CBR provides a bitrate value option.

Required Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: user
- Password: user617

Special Points

A new handler has been introduced as part of VideoEdge 4.5 and above –

New features for handler:

- The new handler has some changes on how the camera adds to the VideoEdge: handler will set the codec of the stream –using the following priority H264, MPEG4, MJPEG - all other values are read from camera. If adding a defaulted AD 8 Channel Encoder, the NVR stream will configure with the settings of CIF, 30/25 FPS, VBR with quality 52.
- On the new handler Real time video bitrate for MAX bitrate values will never exceed the figure set by handler/camera (at max resolution FPS at a set bitrate of 10000 the actual real time bitrate of video will never exceed 8500)

Limitations

- Changing the video source requires a reboot of the encoder. During the reboot, the device will not respond.
- Changing the interlacing parameter requires a reboot of the encoder. During the reboot, the device will not respond.

- Changing streaming parameters like bit-rate, quality, frame-rate, key frame interval and others would require the stream to be restarted, hence a small glitch in play out might be observed during this time.
- Consecutive audio channel pairs should be configured with same codec otherwise RTSP will send a 500 message. Pairing as {PCMU,PCMA},AAC.
- Due to a limitation in the Encoder firmware, the QCIF video stream uses the 172x112 resolution.
- Pattern cancel feature is not support in consistent manner. If “Pattern Cancel” is selected via victor unified client, recorded pattern will be saved, overwriting the existing pattern.
- The handler will support camera bitrate controls of CBR and Control Q. The control Q will be mapped to a VBR tag when showing on NVR camera configuration page. If the camera stream was set to use VBR the handler will automatically change to use Constant Q values.
- When Stream values get set via NVR (resolution/fps /quality/bitrate) get set via NVR, these get embedded in stream URL, and do not update on camera web GUI
- “Focus” and “Iris” support has been removed, to maintain consistency, the “Auto Iris” feature is also disabled.
- When tilt is aligned at the zero-tilt position on the dome (where 180 degree can also flip occur), this may result in the camera continuously titling.
- It has been observed that CBR operation for MPEG-4 at lower frame-rate settings is blocky and full of artifacts. To improve the same, a constant quality settings operating as VBR is found to be more effective. This has been incorporated in the solution.
- Due to a limitation in the encoder, simultaneous PT and Z operation using the encoder on a camera is not supported.
- Due to a limitation in the encoder while operating in resolution QCIF, GOP settings 2 and in CBR transmission mode, it is possible to observe up to 50% frame drops depending on the complexity of input scene.
- Bitrate / Quality or any streaming parameter changes using the encoder webpage do not reflect or take effect on the already started or existing streaming session. Either the encoder needs to be restarted or the streaming session needs to be restarted for these parameters to take effect.
- ADEIP8H on rare occasions the MJPEG stream may send bad frames where the frame size is only several dozen bytes.
- Due to the new quality value is embedded in stream URL, quality does not update on camera web GUI after changed on VideoEdge
- Due to the new bitrate value is embedded in stream URL, bitrate does not update on camera web GUI after changed on VideoEdge
- Please refer to AD 8-Channel IP Encoder (M) and (H) Release Notes for additional information.
- Due to new functionality being introduced the MPV4 bitrate control option will change from CBR to VBR on NVR Version 4.5.0 and after.

American Dynamics Fixed IP Camera

Supported Firmware

- V1.57 or later

Supported Key Functions

- Video Streaming: Single
- Video Codec: MJPEG and MPEG-4
- Audio Streaming: Model specific, G.711 ulaw, A/V, single stream only
- Dry Contact Event - 1 Dry Contact, http poll for dry contact event at 100ms interval
- Query Device

Required Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: 9999

Limitations

- The camera will reboot when changing codec (audio or video), resolution, frame rate, key frame interval, video quality, audio volume, enable audio / audio in and any other audio / video properties. Reboots will take about 20 to 30 seconds and 1 minute to be back online.
- Single HTTP stream to send audio/video interleaved MPEG4 video.
- When the camera is rebooted or codec changed, if focus is adjusted against a grey scene, it will take up to 30 seconds to go back to color.
- When changing codec from MJPEG to MPEG4, if the default bit rate is larger than 8000, an error message will be received when changing the video codec properties; the workaround is to change the bit rate to 8000.

Note:

Please refer to AD Fixed Camera Release Notes for additional information.

American Dynamics Fixed Camera (Illustra 400 series)

Supported Firmware

- V2.20 or later

Supported Key Functions

- Video Streaming – Single, Dual
- Video codec – H.264 and MJPEG
- Audio Streaming – G.711 ulaw and G.726, single stream only
- Dry Contact Events – is polled for dry contact event at 100ms interval
- Query Device
- Device Reboot

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: 9999

Limitations

- The camera will reboot when changing codec (audio or video), resolution, frame rate, key frame interval, video quality, audio volume, enable audio / audio in and any other audio / video properties. The reboots will take about 20 to 30 seconds.
- All audio and video streams will be lost when the camera reboots. All audio and video streams will then need to be re-established.
- When the camera is rebooting, video and audio properties may not be available to get / set new value.
- Due to camera internal resource contention, both profiles (streams) must have the same resolution. If profiles (streams) are set to obtain different resolutions the requested FPS will not be obtainable for MJPEG.
- To achieve optimal H.264 Motion Detection results, the recommended settings are:
 - Stream 1 is H.264, 30fps, D1 or D2 resolution, default quality.
 - Stream 2 is MJPEG, 7 fps, CIF, default quality.
- For some properties' values are retrieved from camera itself (e.g. resolution, quality), that results in that when the user adds the camera, the return value is not the default value defined in the VideoEdge, but the actual value in camera.
- VideoCodecKeyFrameInterval is not supported by the camera handler, but the user can change it from the camera web page.

- For AudioInputVolume, the microphone input and line-in input have different ranges.
- Microphone input:
 - A setting of 'low (1)' is 20dB.
 - A setting of 'high (10)' is 26 dB.
- Line-in:
 - A setting of 'low (1)' is 6 dB.
 - A setting of 'high (10)' is 18dB.
- Due to camera internal resource contention, changing the resolution quality or bit rate may affect the frame rate performance. Please refer to camera limitation.
- Changing the video codec/audio codec may cause the RTSP service in the camera to stop, and the video/audio streaming to stop working, the workaround is to reboot or power cycle the camera
- With camera firmware v2.20, the FPS selections for the MJPEG codec from the camera web GUI shows only "3,5,7,10,12,15,30" for NTSC and "3,5,7,10,12,15,25" for PAL. This, however, does not affect the FPS selections from the VideoEdge client, which remain supporting 1 - 30 for NTSC and 1-25 for PAL.
- To meet the single stream fps, the user can enable dual stream on VideoEdge, configure the stream codec/resolution/fps/quality for Stream 1 and then configure Stream 2 to lowest resolution/fps/quality. Once Stream 2 is configured the user can disable Stream 2 on the VideoEdge. Alternatively the user can access the camera's web GUI settings to change stream 2 to the lowest/resolution/fps/quality.
- Illustra400 Camera will be 'Unknown' in VideoEdge camera list after rebooting the VideoEdge while the camera is offline. The workaround is to first create a password group with the password "9999", then add the Illustra 400 camera with this new group, not the default group.
- Please refer to the AD Illustra 400 Camera Release Notes for additional information.

American Dynamics Fixed Camera (Illustra 210, Illustra 600 and Illustra 610 Domes)

Supported Key Functions

- AD00-00-17-04 or later

Supported Key Functions

- Video Streaming
- Audio Streaming – Supports G711mulaw stream (600/610/210). Illustra 610LT does not support audio.
- Dry Contact Events – Single camera is polled for Dry Contact at 100ms interval (600/610/210). Illustra 610LT does not support dry contact events.
- Query Device
- Reboot

Unsupported Key Functions

- PTZ Operation
- Power off devices
- Get device log
- Find Devices
- Reset to factory default

Audio/Video Streaming Feature

- Supports both MJPEG and H.264 codec.
- Camera will takes around 25-seconds to restart network services after changing the codec or resolution settings.
- Supports two video streams at the same time
- The RSTP audio only stream URL is
`rtsp://camera_ip:7777/audio`
- The rtsp video only stream URL is
`rtsp://camera_ip:7779/primarystream`
`rtsp://camera_ip:7781/secondarystream`
- The rtsp A/V mixed stream URL is
`rtsp://camera_ip:7778/primarystream`
`rtsp://camera_ip:7780/secondarystream`
- The end user can modify the port numbers via camera webpage.

- Handler will select one stream from camera, so the rtsp URL for MJPEG or H.264 can be either of these two URLs

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTP/RTSP

Default Username & Password

- Username: admin
- Password: admin

Limitations

- When the primary and secondary streams are configured with the same codec, changing stream on the VideoEdge may change the opposite stream to the one you wish to change. The Illustra 600 primary and secondary streams configuration will not necessarily reflect stream one and stream two on the VideoEdge. The camera only identifies the streams by the stream codec (ignoring FPS and resolution). In some instances when NVR streams are both configured with the same Codec, changing one of the streams will not necessarily change the parameters on the specified stream.
- Illustra 600/610 camera only supports one 720P/1080P stream. If there is one 720P/1080P stream on the NVR, it is impossible to set another.
- If the secondary stream is enabled via the Camera Web GUI, the camera will keep streaming even when no user requires the stream. To meet the FPS set in the NVR, the other stream should be set to a lower resolution, quality and FPS. Please refer to the camera FPS limitation document.
- To meet the single stream fps, the user can enable dual stream on NVR, configure the stream codec/resolution/fps/quality for Stream 1, and then configure Stream 2 to lowest resolution/fps/quality. Once Stream 2 is configured the user can disable Stream 2 on the NVR. Alternatively the user can access the camera's web GUI settings to change stream 2 to the lowest resolution/fps/quality.
- Changing codec and/or resolution will cause the network service to reboot; this takes about 25 seconds. It will continue to deliver previous video/audio streams in the first 15 seconds. During this time, the camera will be offline. If the user refreshes the VideoEdge web GUI, the properties will be "unknown", the camera may still be rebooting. If the video stream is not created successfully, the properties will show "unknown".
- For some properties, values that are retrieved from the camera itself (such as resolution or quality), when a user adds the camera, the return value is not the default value but the value defined by the camera.
- VideoEdge only supports audio in 8KHz.
- Illustra 600, add 720p and 1080p resolution for MJPEG stream, change the codec or resolution of stream 1 will report an error. Illustra 600 camera only supports one 720P/1080P stream. If there is one 720P/1080P stream on the NVR, it is impossible to set another. Please refer to the camera limitation.
- Auto Exposure switch appears to occur earlier than expected for 720p PAL and 1080p camera.
- The GOP of H.264 must be below 120. If the GOP is too big, several seconds are needed to create a key frame. This will cause a mosaic image effect when opening the VideoEdge if it is not an I-Frame. It is suggested to set the GOP size the same as the frame rate. On the camera, the default factory GOP is 30 for NTSC, 25 for PAL, it is not recommended to change this.
- When changing the FPS, the corresponding RTSP stream will restart. This may result in a minor video loss dependent on the GOP size configured, because the video needs a key frame.

- It is recommended to configure the camera within the camera FPS limitations. If the parameters exceed the limitations, the camera performance may be affected.
- Rebooting the camera to factory default can resolve the camera performance. Once this is complete, reconfigure the camera within the camera FPS limitations.
- VideoEdge does not support changing the quality of H.264.
- Although the VideoEdge does not support changing the quality of H.264, this can be managed through the camera web GUI.
- To support dual streams, it is recommended the interval between changing codec/resolution should be greater than 30 seconds. Otherwise the camera may keep rebooting.
- When changing the codec of stream 1 in a VideoEdge that has dual streams, the error “unable to determine stream 2 – malformed request” will be reported. When the “back” button (refresh in the web GUI) is clicked, the codec will have changed to the configured codec. This is a limitation.
- If Motion Meta Data is enabled, changing codec/resolution of stream1 or stream2 after the camera reboots, the Motion Meta status will be disabled. This is a limitation.
- If the default exposure is configured on the Illustra 600 or 610, a 2 to 3 second video freeze will be experienced as the camera changes mode from day to night. When the available light caught by the camera lens drops sufficiently, the camera changes from Day mode (color images) to Night mode (black and white images). This freeze is related to the time it takes the camera lens to readjust to the light difference when it is set to the default exposure rate and the effect on the VideoEdge as the mode changes over. A workaround for this is to increase the exposure setting. This is a limitation.
- For resolution/frame rate/quality limitation, refer to the camera FPS limitation document.
- Video and audio may become out of sync when navigating playback to specific times on the victor Client clips.
- If the codec on the camera primary stream is MJPEG, when this camera is added into a VideoEdge, the camera will need to change the codec to H.264 and reboot. The camera will be offline for about 20 seconds
- Wrong video timestamp will make VideoEdge create a lot of sessions and have a minor video loss in playback.
- If a user changes the rate control of an Illustra 210 model on the Camera Web GUI to VBR it may cause a pulsation effect on the H.264 stream when using default resolution, FPS and quality values. The Default for the Rate Control is CBR.
- On VideoEdge 4.4 when the bitrate control is changed to CVBR, the VideoEdge GUI will report an error message, please ignore as the change actually taken effect
- The Factory default values for the Illustra Camera models are:
 - Illustra 210 = H.264, Maximum available Fps, D1
 - Illustra 600 = H.264, Maximum available Fps , 1280X720
 - Illustra 610 = H.264, Maximum available Fps , 1920X1080
- The camera will not add after password is changed and correct password group is selected. This issue happens intermittently.
- Any interruption to video stream on the I6x0 Minidome series (stream setting change, camera reboot or camera loss of power) will result on Edge Connection being interrupted even if it will still shows as active on VideoEdge configuration. Just disable and enable the “Edge Motion Detection Alarms” configuration by the VideoEdge alarm tab will restore the connection.
- When monitoring the Blur Detection Alarm Feature on victor Client event window for the Illustra 600 Series Camera, on occasion there may be a delay in the blur detection alarm (can be up to 60 seconds)

- When streaming video from an Illustra 600 series camera in the Motion Detection window of the Search and Retrieve feature of the victor Client, flickering can be observed.
- Setting up Edge Motion on the i6x0 Mini-Dome Cameras via the set up below (Scenario 2) may cause Edge Motion not to trigger correctly. Please follow the work around if you intend to set up your camera using Scenario 2. Otherwise you can use Scenario 1.

1 Scenario 1 - Motion Triggers

- Add camera as default Single Stream - H264
- Enable Edge Motion and configure VideoEdge alarms page (assuming motion is already setup on the camera)
- Motion will always trigger
- Enable Stream 2 Alarm / Record as MJPEG (usually MJPEG, 7, CIF)
- Motion will always trigger

2 Scenario 2 - Motion does not Trigger

- Add camera as default Single Stream - H264
- Enable Edge Motion and configure VideoEdge alarms page (assuming motion is already setup on the camera)
- Motion will always trigger
- Enable Stream 2 Alarm / Record as H264.
- Motion will not trigger.
- At this stage the camera is in a state. Even if you now change Stream 2 to MJPEG, Edge motion will still not trigger.

Workaround for Scenario 2:

- After setting both streams to H264, go back to the Alarm Configuration page on the VideoEdge
- Disable Edge Motion and Save
- Re-enable Edge Motion and Save
- Motion will now trigger.

Special Points

- Some properties are normalized to a percentage (1-100), but the real value in camera is a range from -127 to 128. This results in the values in the VideoEdge not covering all values in the camera.
- When the camera is added to VideoEdge, it is recommended not to change settings from the camera web page (especially video and audio) because the change may need to reboot the video codec and this will affect the VideoEdge.
- When changing the video resolution, frame rate, quality, bit rate, audio codec, the code stream will reboot. At this time, the related property cannot be accessed.
- Resolutions on stream1 and stream2 cannot be changed at the same time.
- 610LT models have removed some functionality available in the 610 standard models. This removed functionality is IR illuminator support, SD card support, and TV input/output support.
- The Illustra 210 models have no support for Region of Interest, Face Detection and Pseudo Multi Pass Encoding.

American Dynamics Fixed Camera (Illustra 600, 610 and 600LT Series Box and Bullets)

Supported Firmware

- v1.0.16 or later

Supported Key Functions

- Video Streaming (MJPEG, H.264 and Dual Streaming supported)
- Audio Streaming
- Dry Contact Event (1 Contact Polling every 100ms)
- Query Device
- Reboot

Unsupported Key Functions

- PTZ Operation
- Power off Devices
- Get Device Log
- Find Devices
- Reset to Factory Default

Audio/Video Streaming Feature

- The rtsp audio only stream URL is:
rtsp://camera_ip/audio.sdp
- The rtsp video only stream URL is:
rtsp://camera_ip/video.sdp
or
rtsp://camera_ip/video2.sdp
- The rtsp A/V mixed stream URL is:
rtsp://camera_ip/live1.sdp
or
rtsp://camera_ip/live2.sdp

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTP/RTSP

Default Username & Password

- Username: admin
- Password: admin

Limitations

- When a factory defaulted camera is added to a VideoEdge, the default settings are: H.264, 7 FPS and CIF. When the user wishes to change the settings they can for single streaming increase the FPS and resolution to max and click Save. For dual streaming, user can enable 2nd stream by selecting Alarm or Record. They should change the codec to MJPEG and click Save.
- To meet the highest single stream FPS, the user can enable dual stream on the VideoEdge, configure the stream codec/resolution/fps/quality for Stream 1, and then configure Stream 2 to lowest resolution/fps/quality. Once Stream 2 is configured the user can disable it on the VideoEdge. Alternatively the user can access the camera's web GUI settings to change Stream 2 to the lowest resolution/fps/quality. For some properties' the value is retrieved from camera itself (resolution, frame rate, quality, brightness, contrast, sharpness) result in that when user adds the camera, the return value is not the default value defined in the VideoEdge, but the actual value in camera.
- The camera will reboot when changing codec (audio or video), resolution, frame rate, key frame interval, video quality, audio volume, enable audio/audio in or any other video/audio properties. Average time for reboot is 30 seconds.
- Changing the video/audio codec or resolution may cause the RTSP service in the camera to stop. With the camera failing to restart and set new streams, the workaround is to reboot or power cycle the camera and reset stream settings.
- All streams will be lost when camera reboots and be automatically reestablished on startup.
- When the camera is rebooting, VideoEdge video and audio properties may not be available to get or set. Any changes made to these settings during reboot time will not be saved.
- In the VideoEdge, under image settings the Video Standard will always display NTSC in the dropdown list, irrespective of it being NTSC or PAL. For PAL cameras, FPS will show 25 as max FPS.
- When the primary and secondary streams are configured with the same codec on the camera web GUI, changing stream on the VideoEdge may change the opposite stream to the one you wish to change. Stream 1 and Stream 2 on the VideoEdge will not necessarily reflect primary and secondary streams configuration on the camera. The camera only identifies the streams by the stream codec (ignoring FPS and resolution). In some instances when VideoEdge streams are both configured with the same codec, changing one of the streams will not necessarily change the parameters on the specified stream.
- It is recommended to configure the camera to the camera's FPS limitations. If the parameters exceed the limitations, the camera performance may be affected. Factory defaulting the camera, and adding to a VideoEdge can resolve this performance issue. Once this is completed, reconfigure the camera stream without exceeding stream limitations. Please refer to camera release notes.
- If the dual stream resolution/FPS is high, the video may be abnormal, a reboot or factory default may resolve this issue.
- Changing the resolution, quality or bit rate of either stream (even when second stream is not active) may affect the frame rate performance. Please refer to the camera release notes for additional information.
- It is recommended to only change one video codec parameter at a time to avoid stream corruption.
- Due to the 2 variants of FPS supported by either MJPEG or H.264, it is recommended to first only change the codec, and then change the resolution and frame rate, or the operation will fail.

- Default IR settings on the 610 Bullet can cause loss of frames. Settings on the camera web GUI should be changed so the ICR trigger condition is “Automatic” and the IR Light is set to “Sync with ICR”.
- Video and audio are out of sync when playback in victor unified client while live view is sync.
- Wrong sequence number in RTSP video stream is received in VideoEdge which causes missing frame.
- After soaking for 4 days, video disordered and large timestamp in video is observed. Normal interval is circa 5000 but 200000 is found.
- The VideoEdge handler does not support *VideoCodecKeyFrameInterval*, but the user can change it from the camera web GUI.
- Jitter will be observed in live view via the VideoEdge and victor, due to camera performance limitations. This due to the camera taking more than 33 ms to send out the key frame. This does not happen in recorded video. Refer to camera release notes.
- RTSP and HTTP stream might be unavailable when user frequently changes codec, resolution and FPS too quick. A waiting time of 2 minutes is recommended.
- i600 & i610:WW: When dual streaming with CBR set to 4M, when enabling motion detection and recording to SD card, FPS will drop to less than 10 FPS. This is due to a camera performance limitation. Please refer to camera release notes.

Special Points

- Do not add the same camera to more than one NVR.
- When the camera is added to NVR, it is recommended not to change settings from the camera web page (especially video and audio) because the change may need to reboot the video codec and this will affect the NVR.
- There is a jitter on H.264 streams if opening dual streams for Illustra 610 cameras. (Stream 1: H.264, 1920x0180 25 FPS & Stream 2: JPEG, CIF, 7 FPS). To improve performance, lower the Frame Rate or resolution of the second stream.
- When changing between PAL and NTSC, the FPS will change as the same rule. The maximum FPS will rise to 30 when PAL is set to 25 and changed to NTSC
- It may take 2 minutes when changing other FPS to 3 FPS. The reason for this is a mismatched GOP and frame rate will cause a longer re-connection time due to waiting for another frame. GOP size is much larger than Frame Rate, it may take a longer time for video to restart.
- Some properties are normalized to a percentage (1-100), but the real value in camera is a range from 0 to 255. This results in the values in VideoEdge not covering all values in camera.

Illustra Pro & Flex (fw 2.0.13 and above) series, Illustra i625 PTZ and i825 FE

Supported Firmware

Camera	Model	Firmware Version
Illustra 625 PTZ, 20x indoor	ADCi625-P132	1.0.0.A4484AAA806 and above
Illustra 625 PTZ, 20x outdoor	ADCi625-P12x	1.0.1.A4491AA810 and above
Illustra 625 PTZ, 20x indoor, Feature Plus	ADCi625-P232	1.0.2.A491AA929
Illustra 625 PTZ, 20x outdoor, Feature Plus	ADCi625-P22x	1.0.2.A491AA929
Illustra Pro PTZ, 30x, indoor	IPS02P6ANBTT	2.0.0.A10475ZZZ395
Illustra Pro PTZ, 30x,outdoor	IPS02P6xxWTT	2.0.0.A10475ZZZ395
Illustra Pro PTZ, 30x, indoor, Feature Plus	IPP02P6ANBTT	2.0.0.A10475ZZZ395
Illustra Pro PTZ, 30x, outdoor, Feature Plus	IPP02P6xxWTT	2.0.0.A10475ZZZ395
Illustra 6x0 Compact Mini-Dome 720p / 1080p	ADCi6x0-M111	1.0.8
Illustra 610 Compact Mini-Bullet 1080p	ADCi610-M022	1.2.4
Illustra LT Bullet	IPL02BxBNWIY	2.0.12
Illustra 2MP Micro	IPS02HFANWSYx	2.1.0
Illustra 825 Fisheye 5MP, Indoor, White, Vandal	ADCi825-F311	1.0.1.B6012AC392
Illustra 825 Fisheye 5MP, Indoor, White, Non-Vandal	ADCi825-F312	1.0.1.B6012AC392
Illustra 1 and 2 Megapixel Flex Box, bullets and minidomes	ADCi600F-xxxx ADCi800F-xxxx	2.0.13
Illustra Pro 3MP & 5MP Mini-Dome	IPS03Dxxxxxx IPS05Dxxxxxx	1.0.0C8982A560
Illustra Pro 2MP Mini-Dome	IPS02Dxxxxxx	1.0.1.C10314A780
Illustra Pro 12MP HD Fisheye	IPS12FFOCWIY, IPS12FFOCWIYA, IPS12FFOCWIYT	Illustra.SS002.00.06.00.1128
Illustra Flex PTZ	IFS02P5ICWTY & IFS02P5OCWTY	Illustra.SS002.00.06.00.1128
Illustra IP PVM	ADLCDxxPPS2x	2.0.10
Illustra Flex 3MP (flex2)	IFS03D1ICWTT, IFS03D1OCWIT, IFS03B1BNWIT, IFS03XNANWTT IFS03CFOCWST	SS004.01.00.00.392 SS004.01.00.00.392 SS004.01.00.00.392 SS004.01.00.00.392 SS004.01.01.00.0518

Camera	Model	Firmware Version
Illustra Flex 4k	IFS08D2ICWTT IFS08D2OCWIT IFS08XNANWTT	SS004.01.03.00.0704 SS004.01.03.00.0704 SS004.01.03.00.0704
Illustra Flex IR PTZ	IFS02P6ONWIT IFS02P6INWIT	SS004.01.06.00
Illustra Pro 2MP/3MP Compact	IPS02HFANWST2 IPS02CFOCWST IPS03CFOCWST	TBC
Generic - all unlisted cameras that are compatible with AD iAPIv3 specification document v1.0.1	N/A	N/A

Supported Key Functions

- Video Streaming (Single, Dual) - H.264 and MJPEG -device dependent
- Audio Streaming - Audio codec supported is device dependent
- Dry Contact Events - HTTP server push is available in iAPI3 for use of obtaining the dry contact event (camera dependent)
- Edge Analytics - device dependent
- PTZ - Applies to cameras that have mechanical Pan, Tilt and Optical Zoom
- Query Device
- DIO
- Multicast
- TrickleStor

Unsupported Key Functions

- Find devices
- Reboot device
- Power off device
- Get device log
- Reset to factory default

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP
- Port 85 is for HTTP metadata streaming

Default Username & Password

- Username: admin

- Password: admin

Default Security group Auto-detect HTTP Authentication Type

From VideoEdge 4.8.100, 4.9.100 and on 5.0 Core onwards iAPI3 handler default security group can now auto detect HTTP authentication type and set according to camera configuration, this eliminates the need for end user to create security groups for authentication types

HTTP protocol Default with Enhance Security

Camera Model and Firmware	Default Enhanced Security Protocol Number of Inputs /Outputs	
	Medium (HTTP Digest)	High (HTTPS/SSLv3)
Flex2 fw: SS004.01.00.01.0432 to SS004.01.01.00.0518	x	
Flex2 fw: SS004.01.02.00.0584 onwards		x
Flex 4K Fw: SS004.01.03.00.0704		x
Pro Minidome fw: 1.3.1.C15847A1455	x	
Pro 12MP FE fw: SS002.01.00.00.0620 onwards	x	
Flex PTZ fw: SS002.01.00.00.0620 onwards	x	
Illustra Pro 2MP/3MP Compact		x
Illustra Flex IR PTZ		x

Note:

For cameras running High (HTTPS/SSLv3) If Enhance Security is selected - The option to allow for Video over HTTP must be enabled to allow for Edge Analytics Integration

Audio/Video and Event Streaming Feature

Common characteristics:

The specific Auto/Video Stream feature characteristics by model families are:

Model Family	Audio/Video Stream Feature	Number of Inputs /Outputs
Illustra Pro PTZ / 625 PTZ: IPS02P6xxBTT ADCI625-P1xx	MJPEG and H.264 Support Dual video streams	0
Illustra Pro PTZ / 625 PTZ Feature Plus: IPP02P6xxBTT ADCI625-P2xxA	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	4/1
Illustra 600M Compact Minidome: ADCI6x0-M111	MJPEG and H.264 Support Dual video streams	0
Illustra Pro Bullet Series: ADCI610-M022 IPL02BxBNWIY	MJPEG and H.264 Support Dual video streams	1
Illustra Pro 2MP Micro IPS02HFANWSYx	MJPEG and H.264 Support Dual video streams	1
Illustra 1 and 3 Megapixel Flex Series Firmware 2.0.x upwards: ADCI600F-xxxx ADCI800F-xxxx	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	1
Illustra 825 Fisheye: ADCI825-F31x	2, 3, or 5 Channels MJPEG and H.264 Support Dual video stream	0
Illustra Pro 2MP, 3MP & 5MP Mini-Dome IPS02Dxxxxxx IPS03Dxxxxxx IPS05Dxxxxxx	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	2/1
Illustra Flex PTZ	MJPEG and H.264 Support Dual video streams Support G711a G711u G726 AAC Audio stream	4/1
Illustra Pro 12MP HD FE	1 Channel MJPEG and H.264 Support Dual video streams Support G711a G711u G726 AAC Audio stream	1/1
Illustra IP PVM	MJPEG and H.264 Support Dual video streams	1/0
Illustra Flex 3MP (flex2) IFS03D11CWTT, IFS03D1OCWIT, IFS03B1BNWIT, IFS03XNANWTT	MJPEG H.264 Support Dual video streams Support G711 Audio stream	1/1
Illustra Flex 3MP (flex2) IFS03CFOCWST	MJPEG and H.264 Support Dual video streams	0

Model Family	Audio/Video Stream Feature	Number of Inputs /Outputs
Illustra Flex 4K	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	1/1
Illustra Pro 2MP/3MP Compact	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	1/1
Illustra Flex IR PTZ	MJPEG and H.264 Support Dual video streams Support G711 Audio stream	2/2
Generic	Assume MJPEG, MPEG4 and H.264 Assume Dual video streams Assume G711a, G711u, AAC and G726 if Audio capability is detected	DPC

***DPC** - Depends on Camera Capability

Note:

All API3 cameras will only support Physical Dry contact status, with the exception of Flex series where Logical will also be available.

Edge Support

Model	Edge Motion Alarms	Edge Motion Metadata	Edge Face Alarms	Edge Face Metadata	Edge Blur Alarms
i625 PTZ	Yes	No	No	No	No
i825 Fisheye	Yes	No	No	No	No
Compact Mini-Dome	Yes	No	No	No	No
Compact Mini-Bullet	Yes	No	No	No	No
Illustra Pro LT Bullet	Yes	No	No	No	No
Illustra Pro 2MP Micro	Yes	No	No	No	No
Illustra Pro Fixed Mini-Domes	Yes	Yes	Yes	Yes	Yes
Illustra Flex Series MiniDome & PTZ	Yes	No	No	No	No
Illustra Flex PTZ	Yes	No	No	No	No
Illustra Pro 12MP HD FE	Yes	No	No	No	No
Illustra Flex 3MP (FLEX2)	Yes	Yes	No	No	Yes
Illustra Flex 4K	Yes	Yes	No	No	Yes
Illustra Pro 2MP/3MP Compact	Yes	Yes	No	No	Yes
Illustra Flex IR PTZ	Yes	No	No	No	Yes
Illustra IP PVM	Yes	No	No	No	No

Note:

For cameras running Illustra Flex SS004.01.02.00.070 or later - If Enhance Security is selected - The option to allow for Video over HTTP must be enabled to allow for VideoEdge Integration

VideoEdge integration with illustra Enhanced security Feature

See VideoEdge configuration with Illustra cameras running enhanced security mode for more information.

Default Security group Auto-detect HTTP Authentication Type

From VideoEdge 5.0 Core iAPI3 handler default security group can now auto detect HTTP authentication type and set according to camera configuration, this eliminates the need for end user to create security groups for authentication types.

MJPEG Usage Consideration

MJPEG video does not use any temporal compression but uses spatial compression. This makes its bandwidth requirements much greater than H.264.

General recommendation:

- Maximum Possible Quality Setting: 100
- Recommended Maximum Setting: 90
- Recommended High Quality Setting: 75
- Recommended Medium Quality Setting: 55

In addition to the above, MJPEG at high resolution and frame rate will use a very large amount of bandwidth. For high resolution, the following is recommended:

i825 Fisheye		
Resolution	FPS	Recommended Max Quality
1936 x 1936	14	60
1920 x 1080	15	70
1920 x 1080	7	80
1600 x 900	15	75
1600 x 900	7	85
1280 x 720	15	80
1280 x 720	7	90
960 x 540	12	70

i625 PTZ/ Pro PTZ		
Resolution	FPS	Recommended Max Quality
1920 x 1080	30	60
1920 x 1080	15	70
1920 x 1080	7	80
1280 x 720	30	70
1280 x 720	15	80
1280 x 720	7	90

General Special Points

- Due to the slow response from the camera APIs and the time out set on VideoEdge some cameras may not add using HTTPS. If this issue occurs please use the following work around. Add camera via HTTP to VideoEdge > Change camera to HTTPS on camera webpage > Move camera on VideoEdge to a security group with the correct security settings.
- VideoEdge Configuration Stream may fail when user is streaming live video on the Camera GUI and setting up streaming configuration on the VideoEdge at the same time. It is advisable not to stream live video on the camera GUI while configuring camera streams on the VideoEdge.
- Video live streaming on the camera web GUI may fail to start if the camera GUI is left open during the VideoEdge configuration. User should log out of the camera then log back in again.

Camera Limitations, Known Issues and Special Points

Illustra 625 PTZ / Pro PTZ:

- i625 VideoEdge Image Settings - Auto Focus and Auto Iris values on the VideoEdge GUI are only able to send a enable Auto command. These will not show current status of the feature. The user can set manual iris and focus on the victor live surveillance pane. To check status of auto focus/ iris users should use the i625 Camera GUI.
- i625 PTZ Day/Night controls are currently available on the camera GUI only.
- Dry Contacts and Edge Based Motion Events will always be sent by HTTP even when the camera is set to HTTPS.
- Dry contacts will only support physical state changes
- In some instances if the i625 PTZ camera is left offline (added to the VideoEdge but powered down) for a prolonged period of time while still configured on the VideoEdge, once reconnected the camera may fail to display PTZ directional commands in Victor Client. This is due to a delay in command request/response. In order to resolve this issue either remove and re-add the camera again or restart the VideoEdge services (please note this will cause a few minutes of video loss on all cameras on the VideoEdge).

Illustra 610 Compact Series, Pro LT Bullet, 2MP Micro

- Due to a bandwidth limitation it is advisable not to configure the camera to MJPEG 30FPS 1080P. If this configuration is required it is advised to lower the quality to 50.

- When corridor mode is configured on a camera streaming at a high resolution the camera will stream at half of the configured FPS.
- Corridor mode support: the VideoEdge “Rotate Image” is limited to 0 ~ 360 degree. Therefore rotating -90 degree with the camera in corridor mode is equal to rotating 270 degree in the VideoEdge.
- When the user adds a camera to the VideoEdge the Bitrate control values become unchecked in the camera GUI. This does not affect actual bitrate - what is requested from the VideoEdge is still received. This also happens when changing Bit Rate Control on the VideoEdge GUI
- The Compact Mini-Dome and Mini-Bullet use 'Stream Priority' for dual streaming. The resolution / fps of Stream 2 will be automatically lowered depending on the settings of Stream 1, to remain within the capabilities of the camera. If a user selects resolution / fps settings which are too high for the camera to accommodate, the VideoEdge will disregard the user's setting and set lower resolution / fps on Stream 2.
- It is advisable to first set Stream 1 to desired settings after adding the camera to the VideoEdge and then setting Stream 2.
- As the camera is always running 2 streams even when no user requires the secondary stream, to set single stream MJPEG with high resolution and fps, the user can enable dual stream on VideoEdge, configure the stream codec/resolution/fps/quality for Stream 1, and then configure Stream 2 to lowest resolution/fps/quality. Once Stream 2 is configured the user can disable Stream 2 on the VideoEdge.
- Edge based motion detection event and will only be available for selection on the VideoEdge when motion detection feature is enabled on the camera. These cameras appear to support edge motion detection metadata via the VideoEdge alarms page however motion metadata is not supported by these cameras.

Illustra IP PVM

- The IP PVM camera uses 'Stream Priority' for dual streaming. The resolution / fps of Stream 2 will be automatically lowered depending on the settings of Stream 1, to remain within the capabilities of the camera. If a user selects resolution / fps settings which are too high for the camera to accommodate, the VideoEdge will disregard the user's setting and set lower resolution / fps on Stream 2.
- Due to high bandwidth, frame loss may be observed when streaming MJPEG. To overcome bandwidth issues, it is recommended to reduce MJPEG quality setting (≤ 50) This can be done via the VideoEdge Quality drop down menu.
- When changing more than one stream configuration property on the VideoEdge, the model displays as “Unknown.” This is due to the camera taking longer to respond and therefore the VideoEdge may time out. If this occurs, it is recommended to refresh the page.
- On rare occasions, after changing stream configurations, Victor would give video loss and not resume. This was due to the camera becoming unresponsive when changing stream settings. To fix the problem, a camera reboot is required.
- The camera and VideoEdge supports 1 dry contact input but as hardware does not have the capability to configure dry contacts, this feature cannot be utilized.
- Due to low sensitivity, the automatic day/night mode may not automatically change in certain light levels. This sensitivity can be adjusted on the camera GUI by increasing the sensitivity level via the Picture Settings page. (Video - Picture Settings)

Illustra Flex

- The resolution of the second stream can't be higher than the first stream's resolution.
- When the resolution of the first stream is 2048x1536 or 2304x1296, the maximum FPS is 12 on PAL and 15 on NTSC.

- The resolution range of stream II depends on the current resolution of stream I for example when the user selects a 3MP resolution they are only able to select CIF on stream 2.
- The camera supports 4 motion zones. However it cannot determine which zone has been triggered. Therefore with regards to Edge Motion on the VideoEdge, it cannot determine the zone either.
- Due to the functionality added to VideoEdge 4.5.1, it may take longer for devices to load on the VideoEdge device list/functions and streams page.
- When a camera is using “digest” as the Video Server Authentication Type, this camera can’t be discovered by VideoEdge and even it can’t be added to VideoEdge manually. It’s recommended to only use the “basic” Authentication Type.
- If the HTTP security protocol (HTTPS/HTTP) protocol is changed the user must perform a software factory default first before adding camera to the VideoEdge. This protocol remains unchanged after a software default.
- The user must not disable the second stream from the camera GUI once the camera is added to the VideoEdge. Audio depends on this second stream.

Illustra Flex iAPI3 Support

As part of the Flex Firmware 2.0.13 we now have added support for Illustra API3 handler. The new API3 handler will allow Flex 1 megapixel camera to now support 2 codecs (H.264 and MJPEG) selection on a single stream when integrated with the VideoEdge.

To connect the Illustra API3 handler with VideoEdge, please use the following steps:

- 1 Remove the camera from the VideoEdge
- 2 Upgrade the camera to FW 2.0.13 using the camera GUI or Illustra Connect Tool.
- 3 Add the camera back on to the VideoEdge

To continue using the Illustra Flex Handler -

Option 1

- You are not required to upgrade the camera to FW 2.0.13 or above

Option 2

- While the camera is configured on VideoEdge with FW 1.39, perform a firmware upgrade using the camera GUI or the Illustra Connect Tool
- Do not remove the camera from the VideoEdge

Note:

Once the camera is running FW 2.0.13 or above, if deleted from the VideoEdge it will automatically start using Illustra API3 handler when added back on to the VideoEdge

- In order to enable a wider support of resolution for stream 1 and 2 – the third stream must be disabled.
- The range of Sharpness is from 0 to 15 in Illustra Flex cameras, this is converted to 10 to 100 in the VideoEdge.
- The range of DayNight mode is “Auto”, “Color” and “BW” in Illustra Flex cameras, this is converted to “AUTO”, “DAY” and “NIGHT”.

- The range of Wide dynamic is “OFF”, “Low”, “Mid” and “High” in Illustra Flex cameras, this is converted to 0 to 100 in the VideoEdge.

Illustra Pro Fixed Mini-Domes

- The camera supports four types of image rotation: None / Mirror / Flip/ Mirror & Flip while VideoEdge only supports None and Mirror & Flip. So when the camera is using Mirror or Flip, the Rotate Image options on VideoEdge image setting page will not be available any longer.
- Dry contacts will only support physical state changes
- The camera supports one touch focus – the operation can also be invoked via VideoEdge or Victor by using the Autofocus commands
- The camera has a mechanical zoom and focus that can be controlled remotely, by default the camera will add with these options disabled (only offering VPTZ on Victor) if manual zoom and focus is required, then the “enable PTZ” option must be selected under the PTZ tab in VideoEdge camera configuration page
- A power cycle of the camera will reload the last configuration saved on previous reboot – this may lead to a discrepancy between camera stream profile and VideoEdge camera stream configuration which may lead to camera becoming unresponsive. To resolve this issue, please remove the camera from the VideoEdge, reboot/power cycle the camera, configure the stream, reboot the camera again and add to the VideoEdge. In order to prevent this from happening, it is recommended to reboot camera following a stream configuration.
- The camera motion detection only works when a suitable H264 stream is running in the camera. This suitable H264 stream needs its width less than or equal to 1920x1140 or lower.
- If user has configured a Motion detection alarms or metadata, then user changes the video stream settings on camera web page and making the suitable H264 stream unavailable, the motion detection will not work any longer. The Motion detection alarms and metadata options on VideoEdge alarm page will disappear accordingly as well, but it will still show for a while until user refresh the VideoEdge page after 30s.

Note:

Face detection is analysed using the entire field of view of the camera, while motion detection will require user to draw a Region of interest

How to get “Motion Detection Edge analytics” retaining camera’s highest resolution stream connection to recorder

VideoEdge

Camera @factory default

Default stream configuration

- Stream1 H264 3MP = 2048x1536 / 5MP = 2592x1944
- Stream 2 H264 1920x1080
- No analytics enabled on Camera

Add camera to VideoEdge

Camera configuration will change to

- Stream1 H264 3MP =2048x1536/ 5MP =2592x1944
- Stream 2 MJPEG 384x216

The above resolution will not allow for “MD Edge”

Note:

If analytics MD was enabled prior to adding camera to VideoEdge this will now be disabled – please follow steps below to enable again

Option 1

- Access VideoEdge function and stream tab configuration page
- Disable Auto configuration
- Now edit camera second stream back to Stream 2 H264 1920x1080 or lower
- Enabled Motion Detection on camera GUI
- VideoEdge will now provide a choice for EDGE ANALITICS under Video Analysis
- Select Edge Based from drop down and save
- Enter Edge analytics configuration
- Configure Edge for either MD metadata or MD alarms

Note:

CONS of this option – Victor will not avail of the low bandwidth MJPEG stream from the camera for resource management – meaning more than likely camera stream will need encoded if viewed in smaller panes

Option 2

- Access VideoEdge function and stream tab configuration page
- Edit camera second stream configured on VideoEdge back to Stream 2 H264 1920x1080 or lower
- Access camera Enabled Motion Detection on camera GUI
- VideoEdge will now provide a choice for EDGE ANALITICS under Video Analysis
- Select Edge Based from drop down and save
- Enter Edge analytics configuration
- Configure Edge for either MD metadata or MD alarms

Note:

CONS of this option – User is quite restricted at to what dual stream configuration it can choose – Stream 2 will need to be H264 and at a resolution of 1920x1080 or lower.

Illustra 825 Fisheye:

- Illustra 825 Fisheye User can enable the PTZ through the VideoEdge admin interface on Device List, open the camera configuration page, put a check mark on "Enable PTZ" under PTZ tab and Apply. PTZ is only effective on active image streams.
- Edge Motion detection is supported on all streams on 1.0.3 firmware (Fisheye, Panorama and Active Image).
- The Illustra 825 Fisheye needs to be fully configured before being added to a VideoEdge.
- Changes to camera mount (changing between wall and ceiling), image source (changing between Fisheye, Panorama and Active streams) and factory defaulting will require the camera to be removed from the VideoEdge and added again. This is due to these actions changing number of video channels and their configuration.
- In order to allow the simultaneous fisheye, panoramic or Active Image views, the camera will be recognized as an encoder when added into the VideoEdge. It will show up as either a 2 (fisheye + panoramic) 3 (fisheye

and 2 active images) or 5 (fisheye + 4 active image) channel encoder depending on the stream configuration on the camera.

- The camera supports dual stream on active stream only - the secondary stream is limited to a single stream of MJPEG 7 fps at the same resolution as the main stream - when dual streaming, it is necessary to always have both streams at the same resolution or issues may arise. For dual-streaming it is advisable to set the H264 stream to the desired resolution before enabling the MJPEG stream.
- Due to camera behavior, when CBR bit rate is set to lowest in range (16) the camera will not stream video.
- When configuring a second stream/ metadata stream for the i825 if configuring multiple channels - we recommend to enable these individually and not as a batch, and wait until each stream becomes available before continuing on to the next one.

Illustra 825 Fisheye Secondary Stream Support

Firmware 1.0.3.B8187AC748 or later

On 1.0.3 firmware, a low bandwidth secondary MJPEG stream has been added for both the Fisheye and Panorama Images. The new configuration will impact available stream configurations: when the secondary Fisheye stream is active, only 2 Active Images can be supported. See the Stream Combinations tables below. The new stream configurations are off by default, therefore there is no change to the camera configuration as part of the firmware upgrade to FW 1.0.3.

See the Procedure below for setup steps.

Table 1 Stream Combinations – When Fisheye Secondary Stream is not enabled

Stream 1	Stream2	Stream 3	Stream 4	Stream 5
Fisheye	Fisheye	Not Available	Not Available	Not Available
Fisheye	Ceiling Panorama	Not Available	Not Available	Not Available
Fisheye	Wall Panorama	Not Available	Not Available	Not Available
Fisheye	Active Image X	Active Image X	Active Image X	Active Image X
Ceiling Panorama	Fisheye	Not Available	Not Available	Not Available
Ceiling Panorama	Ceiling Panorama	Not Available	Not Available	Not Available
Wall Panorama	Fisheye	Not Available	Not Available	Not Available
Wall Panorama	Wall Panorama	Not Available	Not Available	Not Available
Active Image X	Fisheye	Active Image X	Active Image X	Active Image X
Active Image X	Active Image X	Active Image X	Active Image X	Active Image X

Table 2 Stream Combinations – When Fisheye Secondary Stream is enabled

Stream 1	Stream2	Stream 3	Stream 4	Stream 5
Fisheye	Ceiling Panorama	Not Available	Not Available	Not Available
Fisheye	Wall Panorama	Not Available	Not Available	Not Available
Fisheye	Active Image X	Active Image X	Not Available	Not Available

Stream 1	Stream2	Stream 3	Stream 4	Stream 5
Ceiling Panorama	Fisheye	Not Available	Not Available	Not Available
Wall Panorama	Fisheye	Not Available	Not Available	Not Available

Procedure - Enabling Secondary Stream on the Fisheye and Panorama Images

Step	Action
------	--------

- | | |
|---|---|
| 1 | Upgrade camera firmware to 1.0.3 – See camera release notes for further information. |
| 2 | If the camera is already on the VideoEdge, restart the VideoEdge Services to enable the secondary stream. (Advanced > Restart > Restart VideoEdge Services) This will cause a few minutes video loss on all cameras on the VideoEdge. |
| 3 | Alternatively to avoid video loss on other cameras, remove the Fisheye camera from the VideoEdge, then re-add it. |

The default resolution for the Fisheye secondary stream is 320x320. Changing this resolution will reboot the camera to apply the change.

Note:

- If the camera is configured as 5 streams, after enabling the secondary stream on the Fisheye image, delete active images 3 and 4 from the VideoEdge as this is not a supported configuration.
- After enabling the secondary stream on the fisheye image, delete active images 3 and 4 from the VideoEdge as this is not a supported configuration.

- | | |
|---|---|
| 4 | With the secondary Fisheye stream enabled, stream configurations available are: <ul style="list-style-type: none"> • Fisheye and Panorama • Fisheye and 2 Active Images |
|---|---|

Note:

For further information please refer to the i825 Fisheye User Manual and Release Notes

- End -

Illustra Pro 12MP HD FE Fisheye:

The FE unit will add to the VideoEdge as a single channel camera, offering dual streaming of the image source that is currently selected on the GUI. For more information about available image source and resolutions, refer to the camera manual.

It is necessary to set Image Sources, De warping methods and Mounts before adding camera to VideoEdge. If a change to any of the above is required while camera is connected to VideoEdge, remove/ configure the camera, and then add it back to the VideoEdge

The unit will offer a image sources with multiple ePTZ panes (a quad ePTZ on ceiling mode and Combi with 2 ePTZ on Wall mount) however VideoEdge & victor cannot offer PTZ support for these, ePTZ will only be supported on a single Active image.

PTZ Pattern is not currently supported on these units - only Presets will be supported in ePTZ VideoEdge victor integration.

The camera only supports Motion Detection analytics and Edge Motion Detection alarms when a Fisheye image source is active. Using any other image source will disable Motion Detection analytics and will not provide support for Edge Motion Detection events

Illustra Flex PTZ:

- The camera will only offer integration support for auto iris - no manual iris control is available via victor.
- If the audio volume is changed on the VideoEdge admin web page and saved it may display the old value but the volume will have been changed.

Illustra Flex2 3MP and 4K series and Flex IR PTZ and Illustra Pro Compact 2/3MP,

Limitations

- The camera will not support streaming dual MJPEG streams. The camera will either stream a H264, MJPEG dual stream combination or a single MJPEG or H264
- The Camera will offer clip recording/TrickleStore only on H264. No other coded ares supported at present
- When resetting the PTZ database (do not select preserve preset, patterns and sequences) via factory reset or hard reset - if the camera is still connected to VENVR/victor, preset and patterns previously created will need to be removed and recreated on victor PTZ controller - editing existing slots will fail.
- If you remove and re-add the camera to the same NVR or a new NVR, the presets and patterns will need to be created again in victor client even if they are still present on camera GUI.

Known Issue

- Edge Analytics & Enhanced Security:When cameras are on Enhanced Security Edge Recording will not work unless Video over HTTP is enabled on camera GUI. Please check camera GUI, Flex2 Cameras will have automatically disabled Video over HTTP from FW 1.1 onwards when Enhanced Security is enabled.

American Dynamics IP SpeedDome

Serial Number

VideoEdge will use the camera's MAC address as the camera serial number.

Supported Key Functions

- Video Streaming 4 max
- Video Codec – MJPEG, MPEG4 and H.264
- Audio Streaming – Audio codec's are AAC, G.711 ulaw and G.711 alaw. No PCM audio stream
- Mechanical Pan and Tilt and Optical Zoom
- Dry Contact Events – Up to 4 dry contact events are support. The camera is polled for dry contact event at 30s interval.
- Query Device

PTZ Methods

- PTZSpeed
- PTZNudge: Zoom, Pan, Tilt
- PTZFilp
- Preset: Add, Set, Select, Clear Preset
- Pattern: Select, Record (Begin, End, Cancel), Clear

Required Network Ports

- Port 5001 is for IDP (command and control)
- Port 554 is for RTSP

Default Username & Password

- User name: admin
- Password: admin

Bandwidth Efficiency

Bandwidth efficiency has been improved for American Dynamics IP SpeedDome cameras running firmware version 2.0 or later.

The VideoEdge NVR will use an algorithm to control video quality according to the camera firmware version. If version is less than 2.0, the video quality will be altered by changing cameras quality value. If version is 2.0 or later, the video quality will be altered by changing the camera's bitrate value. The conversion from quality to bitrate is:

Camera Firmware	Approx Bitrate at Quality Setting (Max FPS, Max Resolution)				
	20	40	60	80	100
PAL v1.x firmware	1,140,000	5,240,000	9,220,000	16,780,000	25,160,000
NTSC v1.x firmware	1,180,000	5,320,000	8,160,000	15,100,000	24,750,000
PAL v2.x firmware	278,600	557,000	1,080,000	2,130,000	4,220,000
NTSC v2.x firmware	290,000	550,000	1,070,000	2,120,000	4,200,000

Note:

Since the VideoEdge uses CBR to control bitrate, the bandwidth of H.264 and MPEG4 are the same. This handler does not support VBR.

Limitations

- Only one audio stream (G711alaw or G711mulaw) can be used at one time
- Dual video streaming supports H.264/MJPEG and MPEG4/MJPEG, but does not support H.264/MPEG4.
- No PCM audio stream
- Unable to add an IP SpeedDome if it is beyond the IP broadcast range of the VideoEdge
- If Auto Flip is disabled, then the amount of distance of tilt down will be larger when it is close to -90 degrees than other positions.
- If Auto Flip is enabled, then the tilt down operation in NVR will lock the motor which make auto flip failure because the tilt down in NVR is not continues (e.g. moveBy) and the moving amount of distance is very tiny.
- Camera digital PTZ is not supported in this release. So it is not implemented normalization for digital PTZ part.
- In H.264 single stream, the maximum frame rate is 20fps @ D1 resolution @ quality 70.
- The maximum frame rate in dual streaming mode is:
 - When codec is H.264/MJPEG:
 - The maximum frame rate for the H.264 stream is 15fps @ D1 resolution @ quality 70, or 25fps @ 2CIF resolution @ quality 70, or 25fps @ D1 resolution @ quality 40; while the secondary MJPEG stream is 7fps @ CIF resolution @ quality 70
 - When codec is MPEG4/MJPEG:
 - The maximum frame rate for the MPEG4 stream is up to 30fps at any resolution and quality if the secondary MJPEG stream is set to 7fps @ CIF resolution @ quality 70. If the secondary MJPEG stream is set to 25fps @ D1 resolution @ quality 70, then the frame rate for the MPEG4 stream is up to 25fps @ D1 resolution @ quality 90.
- The zoom speed is fixed.
- Audio will not work unless it is enabled through the camera web interface.
- On Victor Client surveillance window, the Iris Open Feature will adjust the Iris to Fully Open. If you require adjusting the Iris you can adjust the setting on the Camera GUI.

Known Issues

- When using IP Dome firmware 2.0.0.645 for streaming H.264 only, users should not use rewind instant play back with victor client. Users should use Search and Retrieve, or don't configure using a H.264 stream.
- The default values for some properties defined on VideoEdge are different from camera's default.
- The dry contact state always returns unknown.
- The definition of preset and pattern in VideoEdge might be changed by user via web-client.
- The VideoEdge will not recognize any presets or patterns already on the dome when it is added to the VideoEdge.
- The VideoEdge will not recognize any presets or patterns added to the dome via its web interface and in fact the VideoEdge may overwrite them.
- Preset and pattern definitions made on the VideoEdge will be mirrored to the device, but not the other way around.
- Preset and pattern definitions should be retained in case of network loss or disconnection / reconnection.
- Preset and pattern definitions will not be deleted when the dome is deleted from the VideoEdge.
- Clients should show only the presets and patterns that have been defined using the VideoEdge (not all 96 slots, defined or not). Presets and patterns defined through the device web configuration will not be shown
- When using the settings H.264 codec, D1 resolution, 25/30 (PAL/NTSC) FPS and the quality is above 90, video will freeze when opening Live View.
- Iris restore button does not work for when using surveillance with victor.
- If the camera loses power or network connection, after coming back online the Dry Contacts will not trigger. A user must disable and then re-enable Dry Contacts on the VideoEdge GUI (Go to Devices - Alarms) to restore the event alerts. Other configuration changes (to codec, fps, resolution etc) do not affect the Dry Contacts.
- In VideoEdge 4.6 the IP SpeedDome may not use auto-configuration to configure the second stream. The Second stream may need to be enabled manually via the VideoEdge GUI.

Note:

Please refer to the AD IP SpeedDome Release Notes for additional information.

American Dynamics Illustra Flex Series Wireless Cube and 1 & 3 megapixel Box, Bullet and Mini -Domes Firmware Version 1.39

Supported Camera Firmware

- For Illustra Flex Box, Bullet, Indoor and Outdoor Mini-Domes firmware 1.39
- For ADCi600F-W012 firmware 0.0.10 or later

Illustra Flex iAPI3 Support

As part of the Flex Firmware 2.0.13 we now have added support for Illustra API3 handler. The new API3 handler will allow Flex 1 megapixel camera to now support 2 codecs (H.264 and MJPEG) selection on a single stream when integrated with the VideoEdge NVR.

The new API3 handler will allow Flex 3 megapixel camera to now support 2 codecs (H.264 and MJPEG) selection on a single stream or dual streams when integrated with VideoEdge NVR.

To connect the Illustra API3 handler with VideoEdge NVR, please use the following steps:

- 1 Remove the camera from the NVR
- 2 Upgrade the camera to FW 2.0.13 using the camera GUI or Illustra Connect Tool.
- 3 Add the camera back on to the NVR

To continue using the Illustra Flex Handler -

Option 1

- You are not required to upgrade the camera to FW 2.0.13 or above

Option 2

- While the camera is configured on VideoEdge NVR with FW 1.39, perform a firmware upgrade using the camera GUI or the Illustra Connect Tool
- Do not remove the camera from the NVR

Note:

Once the camera is running FW 2.0.13 or above, if deleted from the VideoEdge NVR it will automatically start using Illustra API3 handler when added back on to the NVR. If the current handler 4.5.1.18008 is not installed on the NVR then the camera will be recognized as a generic Illustra API3 camera.

Supported Key Functions

- Video Streaming - Single and Dual(H264+MJPEG)
- Audio Streaming - G.711 ulaw
- Dry Contact Events
- Query Device
- Edge Based Motion Detection Events

Unsupported Key Functions

- Power Off
- Get Log
- Factory Defaults
- Find Device
- Reboot
- Alarm out
- Edge Based Motion Detection Metadata

Default Ports

- Port 80 for HTTP
- Port 554 for RTSP

Default Username & Password

- Username: admin
- Password: admin

Camera Serial Number

VideoEdge will use the camera's MAC address as the camera serial number.

Video Streaming Feature

Single and Dual Stream - Handler supports H.264 and MJPEG.

Audio Stream Feature

Handler supports G711mulaw audio

Event Stream Feature

HTTP Server push functionality available in Illustra Flex is used to efficiently obtain the dry contact event and motion detection event. The maximum number of dry contact events and Edge Based motion detection supported by each camera family:

Model	Max No of Dry Contact Supported	Edge Based Motion Detection Supported
ADCi600F-W012	0	Yes
ADCi600F-X002, ADCi800F-X002	1	Yes
ADCi600F-B521, ADCi800F-B521	1	Yes

Model	Max No of Dry Contact Supported	Edge Based Motion Detection Supported
ADCi600F-D111, ADCi800F-D111	1	Yes
ADCi600F-D021, ADCi800F-D021	1	Yes
Generic Camera	0	No

Limitations

Model	Limitations
All cameras except ADCi600F-W012	The resolution of the second stream cannot be set higher than the first stream's resolution.
ADCi800F series	The camera does not support dual stream when the resolution of the first stream is 2048x1536/2304x1296.
ADCi800F series	When the resolution of the first stream is 2048x1536 or 2304x1296, the maximum FPS is 12 on PAL and 15 on NTSC.
All Cameras	The handler is designed that the first stream codec is always H264 and second stream codec is always MJPEG.

Known Issues

Model	Known Issues	Work Around
All	You cannot edit "Edge Motion Detection" on VideoEdge alarm page of a camera which has "Edge Based" video analysis enabled if another camera is located in slot 1 and is offline.	After launching the VideoEdge "Alarms" page, wait for camera 1 to display the "No video" image before selecting another camera from the dropdown menu.
ADCi800F Series	Changing the first stream resolution back to 2048x1536 or 2304x1296 on dual stream mode, will not apply unless the second stream has first been disabled.	In order to enable the first stream with 2048x1536 or 2304x1296, the user must first disable the second stream.
ADCi800F Series	On VideoEdge, configuring the following maximum resolutions (2048x1536 or 2304x1296) the expected Maximum FPS settings available will be: For NTSC the Maximum FPS = 15 For PAL the Maximum FPS = 12	To obtain a higher FPS use a lower resolution than 2048x1536 or 2304x1296.
All	The G711 audio is not synchronized with the video on local VideoEdge client. The audio is 0.5s faster than the video on live view	The audio and video are synchronized for download clip.

Special Points

- After the camera is added to the VideoEdge, it is not recommended that the user changes any configurations from camera web GUI unless specified to do so.
- The camera will not add after password is changed and correct password group is selected. This issue happens intermittently. This is a VideoEdge issue.
- There are 6 profiles on the camera web page, but the VideoEdge only uses profile 1. Ensure profile 1 is set up prior to adding camera to VideoEdge.

- After the camera is Factory Defaulted from the camera GUI, the RTSP authentication is disabled. If the user wants the RTSP stream with authentication, the user must enable RTSP authentication on camera web page before adding to VideoEdge. (Setting Guide:Network Settings->RTSP->Authentication->Action).
- Before enabling "Edge based" (for Edge motion detection events) video analysis through the VideoEdge, you must first configure and enable motion detection, set the motion detection area and related parameters on the camera side.
- In the VideoEdge, the codec for stream 1 will always be H.264 and the codec for stream 2 will always be MJPEG. If you require a single MJPEG stream, switch the "Live", "Alarm" and "Rec" to the second stream
- For the ADCi800F, in order to support both 1920x1080 and 1280x720 resolutions you must reduce the resolution of the second stream to set both cameras streams to 1920x1080 resolution and then reduce the second stream to 1280x720 resolution.
- For the ADCi800F camera, when the resolution of the first stream is 2048x1536 or 2304x1296, the camera only supports single stream. The following points must be considered as a result of this limitation:
 - a After the camera is added to the VideoEdge, the first stream works with 2048x1536 or 2304x1296, however there is only one stream configured on the VideoEdge. To use two streams simultaneously you must set the first stream resolution lower than 2048X1536/2304x1296.
 - b If two streams are already live on the VideoEdge, you are unable to change the resolution of the first stream to 2048x1536 or 2304x1296. To run the first stream on 2048x1536 or 2304x1296, you must first disable the second stream.
- For the ADCi800F camera, when the camera is set at PAL and the first stream is 2048x1536 or 2304x1296, the maximum FPS of the first stream is 12 on the VideoEdge.
- Changing the video settings on the ADCi600F-W012 camera it may take up to 20 seconds for the stream to return if connected via wireless WAN. It may take up to 10 seconds if configured via a LAN.
- Slow shutter should be "OFF" in order to ensure stable and maximum FPS (Image Parameters -> Exposure -> Exposure Mode -> Slow Shutter)

Supported Key Functions

- Video Streaming – Single and Dual
 - Video Codec – MJPEG and H.264
- Audio Streaming (camera dependent)
 - Audio codec – G711mulaw
- Dry contact events – HTTP server push is available in Illustra Essentials for use of obtaining the dry contact event (camera dependent)
- Edge Motion Detection Alarms
- PTZ – Applies to cameras that have mechanical Pan, Tilt and Optical Zoom (camera dependent)
- Query Device
- Alarm output (camera dependent)

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: admin

Supported Camera API & Models

Model	Minimum Camera Firmware Version
IES01CFACWSY / IES01CFBCWIY / IES01MFBNWIY	V2.420.0000.4.R.20150806
IES02CFACWSY / IES02CFBCWIY / IES02MFBNWIY	V2.420.0000.0.R.20150805
IES01D1OCWIY / IES01B1BNWIY IES02D1OCWIY / IES02B1BNWIY	V2.420.0007.0.R.20150715
IES01CFBCWIY / IES01MFBNWIY	V2.002.0001.20160227
IES02CFBCWIY / IES02MFBNWIY	V2.002.0001.20160227
IES01D1OCWIYA / IES01B1BNWIYA IES02D1OCWIYA / IES02B1BNWIYA	ESSE5.01.01.00.000x
IES02D1OCWIYB / IES02B1BNWIYB	ESSE6.01.01.00.000x
IES02CFBCWIYB / IES02MFBNWIYB	ESSE7.01.01.00.0003

RTSP URL

- Video Stream
rtsp://<username>:<password>@<ip>:<port>/cam/realmonitor?channel=<channelNo>&subtype=0
- Video Stream 2
rtsp://<username>:<password>@<ip>:<port>/cam/realmonitor?channel=<channelNo>&subtype=1

Note:

<username>: Username, default value is admin.
<password>: Password, default value is admin.
<ip>: IP address of the Illustra Essentials camera.
<port>: RTSP port number, default value is 554.
<channelNo>: Channel number. It starts from 1.

Camera Serial Number

NVR will use the camera's MAC address as the camera serial number.

Video Stream Feature

The specific Video stream feature characteristics by model families are:

Model Family	Video Stream Feature
All Models	Dual stream: H.264 + MJPEG
Generic	Dynamically acquire from camera

Audio Stream Feature

The specific Audio stream feature characteristics by model families are:

Model Family	Audio Stream Feature
All Models	N/A
Generic	Dynamically acquire from camera

Event Stream Feature

Handler uses HTTP polling mode to get the dry contact status. The maximum number of dry contact events supported by each camera family:

Model	Max # of Dry Contact Supported
All Models	0
Generic	Dynamically acquire from camera

Special Points

- 1 Before using the audio stream/dry contact/Edge Based, user should first enable these features in the camera WebGUI (audio is associated to camera's main stream).
- 2 On NVR "Function & Streams" page, Stream 1 is associated to camera "Main Stream"; Stream 2 is associated to camera "Sub Stream".
- 3 **Special Point - Bitrate / Bandwidth** camera limitation, when the resolution or frame rate changes, the current bitrate may be changed automatically. It is because bitrate range varies with resolution and frame rate under CBR mode.

Limitations

Model	Limitations	Work around
All models	Camera can't be manually added to NVR Device list via HTTPS Reason: Camera limitation, the API response is very slow under HTTPS	Add camera from NVR "Discovered Devices" page
All 2MP models	H264 Frame rate in only about 25 to 28 under NTSC when second stream is MJPEG Reason: Camera performance limitation	N/A

Known Issues

Model	Known Issues	Work around
All models	When using edge-based motion detection, artifacts may be seen on screen when viewing live video at the time of motion. This only occurs when the camera is set to dual-stream and the Record and Alarm streams are set as different streams. Recorded video does not display artifacts.	Set both Record and Alarm stream as the same stream.
All models	When adding a camera, "No VE Text response after waiting 5000 milliseconds" will appear but the action will still be successful.	N/A
Varifocal cameras	Sometimes, the VENVR fails to change resolution and framerate on stream 1 at same time.	Click 'Save' again.

Supported Key Functions

- Video Streaming
- Query Device
- Dry Contact Events
- Reboot

Unsupported Key Functions

- Audio Streaming
- PTZ
- Power Off
- Get Log
- Restore Factory Defaults
- Find Device

Minimum Firmware

- For ACM models – v3.13.16-AC
- For TCM models – v4.11.09-AC

Required Network Ports

- Port 80 is for HTTP
- Port 7070 is for RTSP

Default Username & Password

- Username: admin
- Password: 123456

Supported Resolution

All resolutions less than or equal to 1280 x 720 are dynamically acquired by the camera.

Limitations

- Resolutions larger than 720p are unsupported due to an incompatible algorithm used by the camera when the stream's resolution is larger than 720p.
- HUE feature on all cameras is unsupported, due to the manufacturer's recommendation not to change HUE and not to use VIDEO_HUE command for ACTi cameras.

- Due to camera limitation, the actual frame rate might be higher or lower than the requested frame rate. (Please refer to ATP results).
- For some cameras, RTP stream is not enabled by default. The handler will enable it before creating the stream pipeline. Do not change the stream method while configured on the VideoEdge.
- By default, the B2 header function of the camera is enabled, which is not supported by the VideoEdge. Therefore, the handler will disable this function when a camera is added to the VideoEdge. Don't enable B2 header while camera is added to VideoEdge.
- Dry contact active state in VideoEdge is read-only, this cannot be modified.
- The scope of the image will be changed with a change of resolution, but the base pointer is neither the image's corner nor center.
- The handler will use FPS as GOP. This is because when the camera streams on the RTP protocol, GOP is fixed to 0, which means 1 key frame per second.
- Due to the camera's FPS limitation. When single/dual streaming the FPS available is dependent on several factors e.g. a codec or resolution change may cause FPS on both streams to change.
- Due to the camera's limitation, camera will add to VideoEdge with a lower FPS than supported. When adding a dual streaming camera to the VideoEdge both streams' codec will be set to H.264 highest resolution. Even if the second stream is not actively configured on the VideoEdge, it is still affecting full FPS performance on stream one – in order to extend stream one FPS the user is required to lower the resolution on stream two.
- The handler will restart the stream when the resolution or codec is changed, which may cause a video loss for a few seconds.
- The contrast in camera web GUI displays as 0-100, but the vendor asked us to support 1 to 100, so the contrast supported in VideoEdge GUI is 1-100.
- Focus and iris functions are excluded from support, because all cameras do not support them. However it is possible that future cameras will support these functions.
- WDR feature is currently not supported due to the related API VIDEO_WDR not working correctly on the official release.
- If the FPS is set to variable mode in the camera's web GUI, the VideoEdge field for FPS will automatically become read only.
- The ACTi generic camera driver will not support the following features:
 - Image settings:
 - Lens day/night mode
 - Brightness
 - Contrast
 - Sharpness
 - H.264 stream
- Resolutions larger than 720p are unsupported. Should a camera support a higher resolution, this will not be available via VideoEdge.

Known Issues

- The TCM3511 has an issue with Reverse playback in the VideoEdge client. The user will experience a stutter with the H.264 stream due to the first key frame being received every second.
- Interval between video frames (frame spacing) is not always stable, but video is not affected - no video freeze, stutters or pixilation have been observed.

- Due to camera stream limitations, in dual streaming a change in codec or resolution on one stream may cause another stream's FPS to be changed. The handler is not able to force the VideoEdge camera details to refresh the web page, therefore, the displaying FPS may not be right. Refreshing the web page will update the properties.
- The minimum FPS recommended for ACTi stream configuration should be above 3, due to FPS 1 or 2 causing the following issues:
 - VideoEdge and victor refresh frequently (including the Video panes refreshing)
 - The time stamp interval between the nearest frames is incorrect.
- After an upgrade from VideoEdge 4.5.0 to VideoEdge 4.5.1 for ACTi camera, some of the camera configuration settings may change. If possible please note down the camera Configuration of the ACTi cameras before you upgrade. After the upgrade, please check your settings are correct or adjust accordingly.

Error Messages

- Sometimes adding an ACTi camera onto the VideoEdge may fail with a timeout message. This is caused by 1) APIs for codec and FPS work very slowly. Codec API may take up to 4.9 seconds and FPS API may take up to 2.5 seconds. Or 2) as specified by ACTi support, frequent API calls may cause the camera to work abnormally.

Resolution: Add camera to VideoEdge again.

To avoid this issue, it is recommended configure camera as following before add to VideoEdge:

ACM: @ MJPEG @Highest-Resolution @highest-fps

TCM: Dual stream @H.264 @ Highest-Resolution @highest-fps

- Restoring factory defaults may cause the camera to 1) crash; 2) VideoEdge report timeout when adding it into VideoEdge; 3) Camera to report "Please contact your provider. Error code: 00000001, other error" when trying to connect to the camera GUI.

Resolution: Hardware reset

- Camera may crash when POE/power cable are unplugged and plugged in again. When the issue happens, the camera's web GUI may display "01072915212: Rtsp:Error. Create socket 01072915214:Rtsp:Error. create socket".

Resolution: Power Cycle first. If problem persists, carry out hardware reset.

- Sometimes the camera's web GUI will report "Error: Streaming Engine is not running", when the issue happens there is no stream given out. The camera can be restored after a manual reboot.

Resolution: Hardware reset

- Sometimes modifying contrast or saturation will cause the camera to crash, when this happens, the user may receive the following message on the camera's web GUI: "Please contact your provider. Error code: 00000001, Other error".

Resolution: Hardware reset

Special Points

- Do not factory default unless necessary, because sometimes it may cause many issues (refer to above known issues and limitations)
- Do not modify the camera's root user name. This is because the VideoEdge only supports a password change.

- Do not add one camera into two or more VE NV's.
- When the camera is added to the VideoEdge, it is recommended not to change settings from the camera web page.
- When the camera is added onto the VideoEdge, do not turn off "stream on RTP" setting, this will cause camera stop providing a live RTP stream.
- When the camera is added into VideoEdge, do not change B2 header setting, this will cause the VideoEdge to be unable to parse the stream.
- Only constant FPS mode is supported in RTP streaming due to camera limitation.
- The VideoEdge Video smoothing function is enabled on this handler because the VideoEdge stream refreshes frequently when it is disabled.
- VideoEdge will display 1 when the camera's contrast setting value is 0. Refer to above limitation for detail.
- Handler had hard coded the camera's connection count to 1. Because the connection count is missed in some cameras' response data.
- Before adding a camera onto the VideoEdge, it is recommended to set the settings as close as the handler defaults (H.264 / MJPEG 5FPS 1280x720) , otherwise adding action may fail with a timeout error. Refer to above known issues.
- Some cameras may not contain "-" or "." or spaces between the MAC address on the VideoEdge properties page. This is only a cosmetic issue.

Supported Key Functions

- The Arecont Vision AV8xxx employs four, two-megapixel cameras in 180° or 360° panoramic views. Models are available in a variety of options including H.264 or MJPEG video formats, Day/Night, Heater/Blower, recessed or IP66 housings.
- Using the American Dynamics victor unified client, operators can view each image independently or combination of them in a multi camera view in victor.
- Video Streaming – Single and Dual
- Video Codec – MJPEG and H.264 (Note: AVxxx0 models only support MJPEG)
- Query Device
- Audio Streaming
- Dry Contacts
- Edge Motion detection
- Relay Output State

Note:

Not all Arecont models support Dry contacts and Edge motion detection

Camera Serial Number

VideoEdge will use the camera's MAC address as the camera serial number.

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP
- Port 443 is for HTTPS

Default Username & Password

- Username: admin
- Password: <no password required>

Performance Recommendation for Arecont Multi-Lens/Multi-Sensor Cameras

- 1 Dry contacts are not supported in all Arecont models.
- 2 Edge Motion is not supported in all Arecont models.
- 3 Streaming Performance issues. See Table below for recommended settings.

Note:

The following table highlights the preferred Streaming configuration for Arecont Multi-Lens/Multi-Sensor cameras.

Due to camera performance issues, we recommend that you configure your Arecont Multi-Lens/Multi-Sensor cameras on VideoEdge NVR to the following settings. The table highlights the data collected using various streaming configuration settings and its observations.

Performance Recommendation for Arecont Multi-Lens/Multi-Sensor Cameras			
Setting Option	Stream Configuration	Performance	Recommended for minimal or reduced occurrences of video loss or dropped packets
1	Single Stream @ H264, Quality 35, Half resolution, 5 FPS	Occasional occurrences of video loss or dropped packets (more frequent during low light conditions) on one or more channels.	Yes
2	Single Stream @ H264, Quality 65, Half resolution, 5 FPS	Some occurrences of video loss or dropped packets during the day compared to Setting Option 1 (more frequent during low light conditions) on one or more channels.	No
3	Dual stream. Stream 1 H.264, Quality 35, Full Resolution Stream 2 MJPEG, Quality 72, Half Resolution • Motion Detection Enabled for Stream 2	Frequent occurrences of video loss or dropped packets during the day (both day and night) on one or more channels.	No

Limitations

- For models AV3356PMIR-SA and AV2355RS dry contacts are not supported.
- For AV08ZMV-300 Motion detection and Video intelligence are not supported, as the lowest resolution supplied by the camera is more than 1MP (1920x1080).
- Due to Arecont camera firmware issue, HTTPS is not supported with AV2355RS. AV08ZMV-300 and AV08ZMD-400 do support streaming H264 with HTTPS.
- Camera Firmware limitation : For Arecont models AV08ZMxxx with firmware 1.9, MJPEG is disabled and is not supported on the camera. Therefore VideoEdge will not support MJPEG with camera firmware 1.9. Please reference the manufacturer Arecont camera release notes when an updated camera firmware will support MJPEG.
- AV2355RS : For FPS stability (due to the camera performance issue) we recommend the FPS setting of 12 FPS with VideoEdge. Any other FPS setting may result in large FPS fluctuations, especially when using FPS above 20 FPS.

- AV3356PMIR-SA : For FPS stability (due to the camera performance issue) we recommend the FPS setting of 7 FPS with VideoEdge. Any other FPS setting may result in large FPS fluctuations, especially when using FPS above 15 FPS.
- Unexpected video loss may occur when you configure two streams on an Arecont camera. To avoid this issue, disable auto configuration for the second stream on Arecont cameras
- When Arecont cameras are added via VideoEdge Auto Discovery, there may be issues with camera settings. It is recommended all Arecont cameras be added manually to the VideoEdge, as some older models of Arecont cameras cannot be found via Auto discovery.
- It is advised that the user does not configure the same camera on two VideoEdge at the same time. This is due to ssn accumulation in the streaming URL on the handler, therefore only one camera can be accessed by one VideoEdge at the same time.
- The Arecont 10MP camera(AV10XXX and AV40XXX),will not support VideoEdge motion detection as its lowest supported resolution exceeds VideoEdge limitations.
- Due to a QuickTime player limitation, for 10MP cameras, the video stream with a full resolution (3648x2752) can't be streamed on the VideoEdge web page.
- Streaming large amounts of data to QuickTime may cause a distorted image to appear. This is due to QuickTime or the network card on the host on which QuickTime is running, preventing large bit rate streams particularly during the start up of H.264 due to the bursting of all frames since the previous Key frame. This result may be a green/mosaic screen especially on motion scenes. This may occur for both live and historic playback on VideoEdge and Victor client.
- The AV8xxx will be viewed with victor Client. Not all functionality is supported by the Web-Client.
- Due to a camera limitation, the actual frame rate may be lower than the requested frame rate.
- Due to a camera RTSP performance limitation, for AV8XXX series, the camera can only deliver approximately 2 FPS per lens.
- Due to a VideoEdge performance limitation the max fps is limited to 30 for AV1115, AV1125, AV1315, AV1325, AV2115, AV2125.
- For Multi-Sensor 4 lens camera like AV8XXX, AV20XXX models it is highly recommended to set all four camera inputs to the same storage section in the VideoEdge. Mixing may cause mixed retention times for some inputs compared to others.
- In order to control bitrate of the H.264 stream the user can set quality levels via the VideoEdge camera stream detail page. The bitrate will change according to a number of factors: complexity, light change and movement in the scene. In a scene with a lot of movement at the lowest quality, the bitrate of the stream will be higher than in a still scene at the highest quality.
- Due to a camera limitation, the bitrate and quality cannot be set through the camera's web interface. The bitrate and quality values have to be included in the RTSP URL for them to work.
- When upgrading the camera handler pack, note that the parameters of video streams may be changed to the default values. It is recommended to recheck video codec parameters when upgrading or restoring configuration backups.
- Due to a camera limitation, for Arecont cameras all MJPEG only cameras (Arecont: AVxx00, AV8180, AV8360 - CBC: MP1A, MP2A, MP5A and MP8D-L4) will stream at a higher FPS (reaching max FPS) when setting to 15FPS. FPS of 14 and lower are not affected by this issue.
- VideoEdge 4.1 or above motion detection can only handle a resolution of 800x600 (or 800x592), not 1600x1200 (or 1600x1184) for AV8XXX cameras. (Maximum resolution for VideoEdge to handle motion detection is 1280x960).
- Due to a camera MJPEG video stream non-compliance, motion detection might not work on some models.
- For AV8XXX cameras, motion detection can only be enabled if single MJPEG is set for every lens.

- VideoEdge requires a minimum of four (4) frames per second to provide reliable motion search results. Due to the limitation of the Arecont Vision camera to produce two streams at the minimum frame-rate required for motion data generation video motion search performance will vary.
- Some Multi-sensor cameras (such as AV8xxx, AV5585, AV12275, AV20365) provide an option to "Equalize Brightness" across all four images. This will cause all the lenses to have the same brightness as the first lens. The VideoEdge camera handler has this value unassigned when cameras are added. If the camera has this value set by the camera's web configuration page the camera's brightness cannot be changed by the VideoEdge.
- Due to camera performance limitation and network status, refreshing the camera list within the Victor Client may take 0.1 to 1 second to get each property from the camera. In addition changes to properties on the VideoEdge may take 2 to 30 seconds.
- AV818X and AV2018X are 180° view cameras. Its layout is 4x1 and its sequence is "1,4,2,3". Therefore to display a full view of 4X1, Victor Client should be used. In order to display all cameras correctly the images of input 1 and 2 are inverted 180° by default.
- AV836X and AV2036X are 360° cameras. Its layout is 2x2 and its sequence is "1,2,3,4" and has no rotate issue (all are the same).
- Different Arecont panoramic camera models may produce different bit rates for the same scene.
- Due to the camera firmware issue on AV8185DN, the camera stream may restart on the VideoEdge.
- Due to a camera hardware limitation, for AV8185 and AV8365 cameras, the sensor size is 1600x1200, so the VideoEdge resolution setting is 1600x1200, but it streams at 1600x1184
- When configuring "Edge Based" Motion Detection and Metadata, the motion area should be configured on the camera before adding to the VideoEdge
- For multi-channel cameras, when you change the Day/night mode of one channel, the day/night mode changes for all channels. This is a camera limitation.
- Multi-channel cameras cannot support more than one dry contact. The supported dry contact is linked directly to the initial channel that you configure for the dry contact on the VideoEdge.

Known Issues

- VideoEdge receiving H.264 frames with timestamp prior to last one received for cameras AV3105, AV5105, AV8365, AV10005.
- A number of Arecont cameras have been identified as having firmware issues where cameras may unexpectedly stop sending Frames for a short time (3-7 seconds). In some instances this will trigger a lost video alert. Cameras where this issue has been observed are AV3115DN, AV5125IR, AV8185DN, AV5255AM-H, AV40185DN, AV12275DN, AV12186DN, AV12176DN.
- AV8185, AV10005 series - observed 7 seconds of video loss on camera stream several times this is a firmware issue.
- For some properties' the values are retrieved from the camera itself (e.g. resolution). When an Arecont camera is added to the VideoEdge, the return value is not the default value defined in the VideoEdge, but the actual value in camera.
- For Arecont's MJPEG version cameras, the D/N camera does not return suffix DN for the model. So VideoEdge will not get D/N option.
- On Internet Explorer, if changing the default user name and password, the camera may not be accessed successfully.
- Due to camera firmware defect, the camera does not return the full model name, the VideoEdge cannot support the DayNight and auto Iris settings for all the Arecont cameras. The settings can be configured in the

settings via the camera web GUI. (Note: Please refer to the Arecont Vision Camera Release Notes published by Arecont Vision for additional information.)

- On the AV8185 camera, the camera continually rebooted itself during daytime hours. This was caused by the VideoEdge smoothing mechanism.
- Higher video bit rate may occur under low light conditions, which may cause video loss.

Special Points

- It is recommended when the camera is added to the VideoEdge, not to change any property parameters on camera web GUI.
- Arecont only support two resolutions, one is half, the other is full, and we will convert it to width x height according to the actual picture size.
- MJPEG over RTSP is not supported.
- Video Codec Properties are all set to DB. The properties on the camera web page are not used, and these settings are for default stream fetching by web.
- Internet Explorer may cache the history data, if Internet Explorer is used to get the properties of an Arecont camera by the direct URL (such as `http://<ip>/get1?brightness`), a page refresh should be used to get new data.
- Brightness and sharpness are retrieved from the Arecont camera GUI. There for if the user changes the value on the camera GUI it will change the values displayed on VideoEdge. VideoEdge's value range can't cover all the values of the device. Camera's range is -50, 50 and VideoEdge's range is 1,100. The normalization will be: -50,-41 to 1,10 and -39,50 to 11,100. -40 is not normalized. When the value is read from camera, it is normalized to 11.
- The range of image quality for H.264 is (17, 36). And the normalization are:

36	5
35	10
...	
21	100

- Arecont default has blank username and password. Users can use any password or username to access the camera. But if the password has been set to user admin or viewer, users should use correct username and password to access the camera. Only by doing "Factory default" can set the password to be blank. (NOTE: a blank password does not mean ZERO length string. If user empties the password input in camera's web page, and saves to the camera, still means there is a password set.)
- The VideoCodecKeyFrameInterval is the same for all 4 lenses. The default value is set to 30 by the handler and the camera's default value is 51. (NOTE: the panoramic camera's register address for key frame interval setting is [3:100] not as the individual camera's [3:21]. The setting value is the p frames number between l frames, not containing l frame. (For example, if user wants to set key frame interval 30, the http command should be `http://<cameraip>/set?page=3®=100&val=29`)
- Models AV8185DN or AV8365DN retrieved by `http://<cameraip>/get?model` has a "DN" suffix after the digital model value, i.e. 8185DN or 8365DN, while single lens DN cameras return only digital model value without "DN" suffix, for example, AV3105DN camera returns 3105, not3105DN. User can get the model type with "DN" suffix by `http://<cameraip>/get?model=fullname`(Confirmed by Arecont supporter). Anyway, what is displayed on VideoEdge should be a full model type, which means DN camera should have "DN" information in camera model type.
- For H.264 stream, using default bitrate=8192 Kbits and qp=24.

- For saturation range from camera to VideoEdge, its mapping relationship is:

1	0
2	20
3	40
4	60
5	80
6	100

Supported Resolutions

Model	Maximum Resolution	Resolution Options on VideoEdge
AV1115	1280 x 1024	1280 x 1024 & 640 x 512
AV1125	1280 x 1024	1280 x 1024 & 640 x 512
AV1300	1280 x 1024	1280 x 1024 & 640 x 512
AV1305	1280 x 1024	1280 x 1024 & 640 x 512
AV1310	1280 x 1024	1280 x 1024 & 640 x 512
AV1315	1280 x 1024	1280 x 1024 & 640 x 512
AV1325	1280x1024	1280 x 1024 & 640 x 512
AV1355	1280 x 1024	1280 x 1024 & 640 x 512
AV2100	1600 x 1200	1600 x 1200 & 800 x 600
AV2105	1600 x 1200	1600 x 1200 & 800 x 600
AV2110	1600 x 1200	1600 x 1200 & 800 x 600
AV2115	1920 x 1080	1920 x 1080 & 960 x 540
AV2125	1920 x 1080	1920 x 1080 & 960 x 540
AV2155	1600 x 1200	1600 x 1200 & 800 x 600
AV2805	1920 x 1080	1920 x 1080 & 960 x 540
AV2815	1920 x 1080	1920 x 1080 & 960 x 540
AV2825	1920x1080	1920 x 1080 & 960 x 540
AV3100	2048 x 1536	1024 x 768
AV3105	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3110	2048 x 1536	1024 x 768
AV3115	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)

Model	Maximum Resolution	Resolution Options on VideoEdge
AV3125	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3155	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV5100	2560x1920	1280 x 960
AV5105	2560 x 1920	2560 x 1920 & 1280 x 960 (1280 x 960 only for MJPEG)
AV5110	2560 x 1920	1280 x 960
AV5115	2560 x 1920	2560 x 1920 & 1280 x 960 (1280 x 960 only for MJPEG)
AV5125	2560 x 1920	2560 x 1920 & 1280 x 960 (1280 x 960 only for MJPEG)
AV5155	2560 x 1920	2560 x 1920 & 1280 x 960 (1280 x 960 only for MJPEG)
AV20185DN	2560x1920	2560x1920 & 1280x960
AV10005	3648x2752	3648x2752 & 1824x1376
AV8180	1600x1184	1600x1184 & 800x592
AV3256PMTIR-S	2048x1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
VAV5255PMIR-SH	2592x1944	2592x1944 & 1296x972 (1296x972 only for MJPEG)
AV1555DN	1280 x 960	1280 x 960 & 640 x 480
AV2555DN	1920 x 1080	1920 x 1080 & 960 x 540
AV2556DN	1920 x 1080	1920 x 1080 & 960 x 540
AV3555DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3556DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV5555DN	2592 x 1944	2592 x 1944 & 1296 x 972 (1296 x 972 only for MJPEG)
AV1455DN	1280x1024	1280 x 1024 & 640 x 512
AV2455DN	1920 x 1080	1920 x 1080 & 960 x 540
AV2456DN	1920 x 1080	1920 x 1080 & 960 x 540
AV3455DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3456DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV5455DN	2592 x 1944	2592 x 1944 & 1296 x 972 (1296 x 972 only for MJPEG)

Model	Maximum Resolution	Resolution Options on VideoEdge
AV1145	1280x1024	1280 x 1024 & 640 x 512
AV2145	1920 x 1080	1920 x 1080 & 960 x 540
AV2146	1920 x 1080	1920 x 1080 & 960 x 540
AV3145	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3146	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV5145	2592 x 1944	2592 x 1944 & 1296 x 972 (1296 x 972 only for MJPEG)
AV2246	1920 x 1080	1920 x 1080 & 960 x 540
AV2245	1920 x 1080	1920 x 1080 & 960 x 540
AV3245	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3246	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV5245	2592 x 1944	2592 x 1944 & 1296 x 972 (1296 x 972 only for MJPEG)
AV1245	1280 x 960	1280 x 960 & 640 x 480
AV1255PM	1280 x 960	1280 x 960 & 640 x 480
AV1255DN	1280x1024	1280 x 1024 & 640 x 512
AV2255	1920 x 1080	1920 x 1080 & 960 x 540
AV2256	1920 x 1080	1920 x 1080 & 960 x 540
AV3255	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3256	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV5255	2592 x 1944	2592 x 1944 & 1296 x 972 (1296 x 972 only for MJPEG)
AV10255	2648 x 2752	3648 x 2752 & 1824 x 1376 (1824 x 1376 only for MJPEG)
AV12275DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV12276DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV20275DN	2560 x 1920	2560 x 1920 & 1280 x 960 (1280 x 960 only for MJPEG)
AV12176DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV20175DN	2560 x 1920	2560 x 1920 & 1280 x 960 (1280 x 960 only for MJPEG)

Model	Maximum Resolution	Resolution Options on VideoEdge
AV5585PM	1280 x 960	1280 x 960 & 640 x 480
AV12585PM	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV12586PM	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV20585PM	2560 x 1920	2560 x 1920 & 1280 x 960 (1280 x 960 only for MJPEG)
AV12186DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV12366DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV40185DN	3648 x 2752	3648 x 2752 & 1824 x 1376 (1824 x 1376 only for MJPEG)
AV1215PM	1280 x 960	1280 x 960 & 640 x 480
AV2215PM	1920 x 1080	1920 x 1080 & 960 x 540
AV2216PM	1920 x 1080	1920 x 1080 & 960 x 540
AV3215PM	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3216PM	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV5215PM	2592 x 1944	2592 x 1944 & 1296 x 972 (1296 x 972 only for MJPEG)
AV10215PM	3648 x 2752	3648 x 2752 & 1824 x 1376 (1824 x 1376 only for MJPEG)
AV3236	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV2116DN	1980 x 1080	1980 x 1080 & 990 x 540
AV3116DN	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3135	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV1225	1280 x 960	280 x 960 & 640 x 480
AV2225	1920 x 1080	1920 x 1080 & 960 x 540
AV2226	1920 x 1080	1920 x 1080 & 960 x 540
AV3225	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV3226	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV5225	2592 x 1944	2592 x 1944 & 1296 x 972 (1296 x 972 only for MJPEG)

Model	Maximum Resolution	Resolution Options on VideoEdge
AV10225	3648 x 2752	3648 x 2752 & 1824 x 1376 (1824 x 1376 only for MJPEG)
AV08ZMD-400	3840 x 2160	3840 x 2160 & 1920 x 1080 (1920 x 1080 only for MJPEG)
AV08ZMV-300	3840 x 2160	3840 x 2160 & 1920 x 1080 (1920 x 1080 only for MJPEG)
AV3356PMIR-SA	2048 x 1536	2048 x 1536 & 1024 x 768 (1024 x 768 only for MJPEG)
AV2355RS	1920 x 1080	1920 x 1080 & 960 x 540

Supported Key Functions

- Video Streaming – Single and Dual
 - Video Codec – MJPEG, MPEG4 and H.264 depending on camera functionality
- Audio Streaming
 - Audio codec supported depends on camera functionality
- Dry Contact events
- Edge Device Motion Detection
- PTZ – Applies to cameras that have mechanical Pan and Tilt and Optical Zoom.
- H264+ / Zip Stream
- Query Device
- Reboot Device

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: root
- Password: pass

Note:

These are associated with password group 0 (default)

Supported Camera API and Models

- Camera API: VAPIX 2 and VAPIX 3. The VideoEdge will interface with any AXIS Cameras that support VAPIX 2 or VAPIX 3. The feature and performance of the cameras might vary due to VAPIX 2 or VAPIX 3 or camera limitations
- Model: Models that support VAPIX2 and VAPIX 3 Camera API. If the camera model is not on the list, then select AXIS-generic

Camera Serial Number

- VideoEdge will use the camera's MAC address as the camera serial number.

Video Streaming Feature

- For VAPIX 3 cameras, all MJPEG, MPEG-4 and H.264 streams can have different frame rates, resolution and quality.
- Cropped resolutions are not supported and do not appear in the resolution selection list.

Audio Streaming Feature

- Handler supports G711mulaw, G726, AAC.

Limitations

Model	Limitation
All	<ol style="list-style-type: none"> 1 For cameras that claim to support absolute and auto focus but fail to provide minFocus and maxFocus (the focus range), the VideoEdge web page (Image Settings -> Lens/Sensor) will display the Auto-Focus option but will not display the focus range when Auto-Focus is disabled. The AXIS 215 is an example of such a camera. 2 Older versions of the AXIS handler may have set the “exposure”, “input gain”, “WDR” and other parameters on some AXIS cameras to invalid values. 3 The camera’s web interface can be used to determine whether the camera parameters have been set to invalid values. Click “Setup->System Options->Advanced->Plain Config” and then select the appropriate parameter group (image source, PTZ, etc). The invalid values will be displayed but will be appended with “(not supported?)”. The AXIS handler will also see the “(not supported?)” in the parameter value strings it reads from the camera. If any invalid values are found then use the camera’s web interface to change invalid settings to valid settings. 4 After an AXIS camera has been disconnected from the network, it can take up to 22 seconds to raise an alarm and attempt a reconnect after the dry contact connection to the device is lost. However, the loss of the video stream from that camera will be detected within a few seconds and an alarm will be raised. 5 If the camera’s own web GUI is used to rotate an image (instead of using the VideoEdge web client “Image Settings” screen) then the change does not take effect on existing streams until an FPS or resolution change causes the stream to be destroyed and recreated. It is recommended to use the VideoEdge web client “Image Settings” screen to rotate the image because that will cause the stream to be destroyed and recreated. 6 If the customer needs to change the active state of a dry contact input then it should be changed before adding a corresponding alarm sensor otherwise an alarm/alert may be caused as a result of changing the active state. 7 H264 VBR bitrate settings are not available on the VideoEdge. If the VBR bitrate settings have been changed via the camera web interface, the settings will not impact the VideoEdge configured streams. 8 The AXIS API does not provide the same functionality across different cameras. When lens WDR property is set to “1”, the AXIS camera’s wide dynamic range settings will

Model	Limitation
	<p>be set to “on” for some cameras and for others to “WDR3”. Setting to “0” will turn all to “off”.</p> <p>9 If the MJPEG quality level is set to 100 at high resolutions (1920x1200 for example) then live viewing problems (such as high latency, momentary loss of video, etc) may be observed in a Victor Client surveillance screen if that workstation is also trying to live view using the VideoEdge web client. To avoid the problem, either reduce the quality level or reduce the number of live viewing clients that are running on the workstation. Also the FPS provided by the camera may drop dramatically as a result of increasing the quality level to 95 or higher. Refer to QC 9761 for more info.</p> <p>10 The Axis M3204 and other models that have the exposure setting at “automatic” (default) will reduce FPS to improve image quality when poor lighting conditions occur. To avoid the FPS reduction when the lights are turned off in the room being viewed then change the exposure setting from “automatic” to “hold current” however the consequence is that the image quality could be very poor (dark). Refer to QC 9897 for more info.</p> <p>11 A frame rate drop or a brief video loss may occur at the moment that lights are turned off in a room being viewed when receiving MJPEG from Axis Day/Night cameras. To avoid the problem, either use MPEG-4 or H.264 to receive the stream. Refer to QC 9651 for more info.</p> <p>12 The VideoEdge web client allows selection of 8 Kbps audio bit rate and AAC Audio Codec but not the audio sampling rate. Selecting the 8 Kbps audio bit rate setting will result in a loss of audio if the sampling rate is 16 KHz or higher. Use the camera's own web interface to change the audio sample rate to 8 KHz if the 8 Kbps audio bit rate is selected. This limitation occurs on Axis cameras that support AAC Audio Codec and the 16KHz (or higher) Audio Sample Rate. Please refer to Axis camera documentation for details. Refer to QC 9623 for more info.</p> <p>13 After enabling dry contact inputs, ensure that LAN connectivity to the camera is maintained otherwise frequent VideoEdge event log messages will be generated about failed attempts to re- establish dry contact event streams and an infrequent reload of the Axis handler may occur due to a race condition flaw in libcurl version 7.21.3.</p> <p>14 When configuring “Edge Based” Motion Detection and Metadata, the motion area should be configured on the camera before adding to the VideoEdge.</p> <p>15 Edge Based Motion Events and Edge Based Motion Metadata Streams are only supported when “configure included windows” radio box is selected on camera web interface.</p> <p>16 Edge Based motion detection may only be available when there is at least one H264 stream enabled on the device.</p> <p>17 When enabling motion detection via the camera GUI in order to use “Edge Based” motion detection, the sensitivity may need to be increased in order to gain precise detection results.</p> <p>18 MJPEG codec does not support 5MP (2592*1944) or 3MP (2048*1536) resolution due to a RTP limitation which the victor/web client player use – These resolutions have been removed from the VideoEdge resolution list.</p> <p>19 Setting stream configuration on the VideoEdge does not reflect on the camera whilst</p>

Model	Limitation
	<p>VideoEdge stream settings are not impact by the camera webpage. When camera is added the user should configure stream settings on the VideoEdge.</p> <p>20 Due to camera performance limitations, some Axis cameras cannot reach the FPS set on the VideoEdge especially when dual stream is configured. Please refer to camera documentation.</p> <p>21]Audio volume increment can be set in increments of “3”. Current implementation does not incorporate the volumes “mute”, “auto” or non-integer values therefore such volume will be default to 0 when the camera is first added to the VideoEdge.</p> <p>22 The audio bitrate 24Kbps is not supported for G726 codec. It is recommended to change the G726 bitrate to 32Kbps before adding the camera to VideoEdge.</p> <p>23 The audio AAC bitrate range of Axis camera varies according to the sample rate. As VideoEdge does not support this audio sample rate, some bitrate options will not be supported on VideoEdge which are supported by the camera.</p> <p>24 The VideoEdge FPS range does not change according to model type, video standard or power line frequency set on the camera webpage– it will always give options 1-30. For cameras which are set to PAL or 50Hz power line frequency, the camera maximum is 25 FPS.</p> <p>25 VLC/QuickTime does not support codec G726 audio when trying to playback exported clips with G726. If necessary, victor player can be used to play G726 audio.</p> <p>26 White Balance settings are not supported on this Axis handler.</p> <p>27 If streaming audio via the G726 codec, to decrease the level of loud noise it is recommended to lower the camera audio input gain via the camera webpage. (setup -> audio settings)</p> <p>28 As Auto-Iris is enabled by default, in order to adjust IRIS+ and IRIS- through Victor, the Auto Iris check box must be disabled via the VideoEdge webpage. The Victor surveillance window needs to be refreshed (drag camera back in surveillance pane) in order for the Iris panel to be updated with this change.</p> <p>29 Input/output Camera with firmware version 5.XX or less than, it cannot be added to VideoEdge using https protocol. Settings should be configured on the camera before adding to the VideoEdge, if these are required for VideoEdge integration.</p> <p>30 Digital PTZ is not supported on this handler.</p> <p>31 When using search and retrieve on Victor to search for a “Motion Detection” scene, in order to get maximum results, it is recommended to set the “amount of motion” and “duration” to “0.”</p> <p>32 Cameras using FirmWare from 6.10 onwards uses Axis VMD3 instead of VMD2.1</p> <p>33 Some Axis Cameras Support a feature called ZipStream technology this is not supported in VideoEdge 4.9 or lower.</p> <p>34 The FPS is impacted by the ‘shutter’ in low light. If the user wants to keep 30 FPS in low light then the max shutter value should be 1/30 however this does not appear to work on the camera. A Case number against Axis has been opened : 617796.</p> <p>35 Camera’s with firmware version 5.XX or before, may not add to VideoEdge with default password group, The user needs to add a new security group with http basic level and try again.</p>

Model	Limitation
	<p>36 There is always a prompts "An Error occurred when setting relay output pulse" when execute relay output pulse, but it actually runs successfully.</p> <p>37 Changing states of dry contacts inputs(s) does not affect the alerts received in victor. Both high and low state produce the same alert.</p>
All Encoders	<p>1 Due to limitation in the Axis Encoder PTZ support, AD Ultra 8 analog PTZ presets are not supported on Axis Encoders. (Axis Ticket 317075).</p> <p>2 When working with Axis encoders the number of Presets supported are:</p> <ul style="list-style-type: none"> a 32 for Pelco analog cameras. It is known from Axis that this is a Pelco driver limitation (Axis ticket 317074). a 20 presets on M7001 encoder (Axis Encoder limitation) b 50 for Bosch analog cameras <p>3 Preset capabilities for the UltraDome 8 analog cameras do not function properly with the Axis encoders. This issue is not limited to the Victor Client; it occurs when trying to add/select/delete presets through the Axis web page itself. This is an Axis encoder issue. As AD Ultra 8 analog cameras do not support presets, they can be added on VideoEdge local client and victor client, but do not function when executed.</p> <p>4 The original VideoEdge requires Axis cameras to have absolute PTZ capabilities in order to support PTZ presets. Since Axis tech support guarantees that their encoders will support preset functionality even if the absolute PTZ is absent, the VideoEdge will always enable the preset support for all Axis encoders as long as the PTZ is enabled both in the VideoEdge and the Axis encoder.</p> <p>5 An attempt to add a preset to AXIS encoders (with AD Ultra 8 analog PTZ camera) will result in a "Error: query not implemented" HTTP error being returned in response to a "http://<ipaddress>/AXIS-cgi/com/ptz.cgi?query=position&camera=1" HTTP request. The reason for this is that the Sensormatic driver for the AD Ultra 8 camera does not allow the position to be queried. The parameter list retrieved from the encoder will report that absolute pan, tilt, zoom is not supported.</p> <p>6 The number of presets allowed is capped at 50 for the victor Client. When working with encoders, only the first 32 presets function properly. Axis documentation claims each channel can support 100; however this does not appear to be the case.</p>
M7001	For Pelco analog cameras added to M7001 will produce shaky video and video loss
207W	The victor client activity window shows an unexpected extra offline entry and online entry for the AXIS 207W camera after it has been disconnected and then reconnected. This second offline/online entry is due to an apparent flaw in the AXIS 207W camera.
Q1755	<p>1 Q1755 without PT head installed will still show up as a PTZ camera in VideoEdge. However, none of the PTZ functions will work. This limitation could apply to all cameras that have built-in PT/PTZ head support.</p> <p>2 An attempt to add a PTZ preset for AXIS Q1755 fails because the getPositionSync method returns "Not supported" error as a result of the AXIS Q1755 not returning pan and tilt position info when PTZ position is queried. The zoom position is returned but not the pan and tilt position. Since the Q1755 cannot pan and tilt without the motor accessory then perhaps the need to set presets for zoom only is not critical.</p>
240Q, 241Q	When an AXIS 240Q or 241Q four-port encoder is added to the VideoEdge, camera slots

Model	Limitation
	will be created for all four ports regardless of whether the encoder inputs are receiving analog signals. If an analog signal is not preset, black video will be received by the VideoEdge and recorded / streamed to viewing clients. To conserve VideoEdge disk space and reduce network traffic, the camera slots associated with the unused inputs can be deleted from the VideoEdge but they cannot be added again unless the entire encoder is deleted and re-added.
210A, 233D	The latest firmware (4.47) in the AXIS 210A camera and some other VAPIX 2 camera and encoder models have a flaw that limits the FPS of MJPEG streams to the FPS of an existing MPEG-4 stream until the MPEG-4 stream is destroyed. For example, if the configured FPS of two MJPEG streams is 20 FPS and 5 FPS and the FPS of the MPEG-4 stream is 15 FPS then the actual FPS of the MJPEG streams will be 15 FPS and 5 FPS until the MPEG-4 stream is destroyed. Similarly, if the MPEG-4 stream is 1 FPS then the actual FPS of the two MJPEG streams will be 1 FPS. A workaround is to ensure that the FPS of an existing MPEG-4 stream is greater than the configured FPS of the MJPEG streams. Another workaround is to update the AXIS firmware to an latest version (4.48 for example) which does not exhibit this symptom.
214 PTZ	When using /AXIS-cgi/com/ptz.cgi?camera=1&areazoom=<int>,<int>,<int less than 100> AXIS API to zoom out on AXIS 214 PTZ camera, the zoom position will reverse to maximum zoom in when the request causes a zoom out to go beyond the widest zoom out position. This, according to AXIS technical support, is a bug within the AXIS 214 PTZ camera (v4.40). The above mentioned API is used by VE API to perform PTZ Nudge operation.
All VAPIX2 cameras	An AXIS VAPIX 2 camera will momentarily disrupt an MPEG-4 video stream as a result of changing the audio codec which causes the VideoEdge to stop/recreate the video stream. During recorded playback by Victor Client, a blank image appears for a very short period at the point in time where the audio codec was changed.
233D	The zoom speed on AXIS 233D is fixed.
Q7406, Q7436	AXIS Q7406 does not support PTZ positioning query. Hence VideoEdge will not be able to obtain auto- focus and auto-Iris status.
All PTZ cameras	<ol style="list-style-type: none"> 1 Due to AXIS cameras limitations the VideoEdge is not able to use the same HTTP connection for multiple PTZ functions, which might result in higher PTZ latency. 2 TFS Bug 113760] Due to camera behavior the Iris settings of the camera changes very slowly, the VideoEdge web page needs to be refreshed in order to be updated with this change. 3 PTZ in H264 may show pixilation. This is also shown on the camera web page when using H264. Workaround - Use MJPEG
Q7406, 241Q, 243Q	AD Ultra 8 analog PTZ are not supported on Q7406, 241Q and 243Q
212	<ol style="list-style-type: none"> 1 AXIS 212 can't pan or tilt if the camera is in full zoom out mode. 2 AXIS 212 can't zoom out stop near full zoom distance and cannot set to full out.
214	Axis 214 when zooming out to full position, when zooming in t he same amount of distance will be executed.
221, 223	The Axis 221 and 223 are falsely recognised as PTZ cameras. As a consequence Victor Client will show the PTZ icon and the VideoEdge web admin will show the PTZ link when using both cameras.
223M	<ol style="list-style-type: none"> 1 Stream settings should be configured before enabling Motion Detection. 2 Resolution above 640x480 will not stream in VideoEdge.

Model	Limitation
All Megapixel cameras	The VideoEdge admin client provides no control for changing the “capture mode” of an Axis P1346 camera and other megapixel cameras. Therefore it may be necessary to use the camera’s own webpage to set the desired capture mode to enable the use of associated video resolutions. After changing the capture mode, it will be necessary to refresh the VideoEdge admin client camera details page to select from the currently available resolutions.
P5522	If an Axis P5522 PTZ camera is not receiving sufficient power for its PTZ operations then it will disable the PTZ motor and remove the PTZ. As a consequence, no PTZ controls will be available in the VideoEdge and the clients for that camera. The symptom may also occur when other PTZ camera models receive insufficient power.
Q1910,Q1921	The default palette setting of an Axis Q1910 or Q1921 thermal camera can only be changed by using the camera’s web page “Setup -> Video & Audio -> Video Stream -> Image Appearance.Palette”. Changing the default palette has no effect on established streams. The VideoEdge uses whatever the default palette is when the stream is established. After the customer changes the default palette then it is necessary to destroy and recreate the stream received by the VideoEdge. The stream can be destroyed and recreated by simply using the VideoEdge admin client to change the video frame rate.
M5013, M5014	The Axis M5013 and M5014 have a single speed PTZ movement therefore the camera PTZ movement is affected only by the interval between the start and stop commands from Victor Client, not the speed values in the start command. The consequence is that PTZ movements may be larger than desired.
P8221	<ol style="list-style-type: none"> 1 When added to the VideoEdge the device cannot be seen on the video list as it does not support video stream. The user must go to the audio list to see the device listed 2 When added to VideoEdge, the firmware for this device displays as “UNSUPPORTED” until the audio device is enabled. Use the following steps to do this: <ul style="list-style-type: none"> • Add camera to VideoEdge • Select “Audio List” tab • Select edit icon • Select “Enable” from drop down menu • Save 3 When the P8221 is added to the VideoEdge but is offline, the settings can still be accessed but will appear as “unsupported”] 4 As VideoEdge dry contact is only associated with video, P8221 Audio I/O module dry contact cannot be used as this device does not support video stream. 5 As VideoEdge PTZ is associated with video, P8221 PTZ feature cannot be used as this device does not support video stream. 6 This audio only device cannot be live viewed in VE Hybrid/ local client as audio devices cannot be selected for surveillance. It is recommended to associate the device (via associate audio setting in VideoEdge) with a camera which streams video.
M1054	<ol style="list-style-type: none"> 1 Although there are two dry contact inputs on VideoEdge admin client, the second dry contact input is used for the PIR sensor and therefore cannot be used as a dry contact input alarm source.
M3007	<ol style="list-style-type: none"> 1 Adding M3007 to the VideoEdge will add up to 6/8 streams. As this camera has a

Model	Limitation
	<p>maximum FPS of 12, adding too many streams would cause FPS to decrease further. When all channels are added to the VideoEdge, the FPS decreases - deleting some of the streams will increase FPS on the remaining configured streams.</p> <p>2 Changing image settings on one channel on the M3007 will be applied to all channels.</p> <p>3 The camera mode should be set before adding M3007 to VideoEdge. When changing the camera mode the camera should be deleted from the VideoEdge and re-added after the camera has been configured.</p> <p>4]If the M3007 camera mode is set to "wall mount" 6 channels will be added to the VideoEdge. However, if the M3007 is set to "ceiling mount" 8 channels will be added to the VideoEdge. The rotate image should be set on camera before adding into VideoEdge.</p> <p>5 If there is frame loss overnight, it may cause a quick flicker to occur during video. Downloading the video clip will not show any video loss.</p> <p>6 If frame loss is experienced overnight, it may cause a few second video freeze.</p> <p>7 On the VideoEdge, Edge Based Motion Detection/Edge Based Meta Data can only be configured on channel 1 - the Overview/Fisheye channel. This is because the camera itself configures motion detection on the Overview/Fisheye stream; which adds to the VideoEdge as stream 1.</p> <p>8 Axis Fisheye M3007 camera limitation: When added to the VideoEdge (from camera factory default settings), the camera is added to VideoEdge either as a 6 or 8 channel encoder, the fisheye stream is limited to 3FPS, and due to the low FPS this will cause victor dewarp feature to create an un-smooth PTZ movement.</p> <p>9 Work around: Limit the fisheye channels on the VideoEdge to increase FPS performance for the camera. For example they can use the following combinations:</p> <ul style="list-style-type: none"> • Fisheye stream only - 12 FPS (1 channel only) • Fisheye + 4 Active streams 7 FPS (5 channels only) • Fisheye + 2 Active 10 FPS (3 channels only) • Fisheye & Panorama 10 FPS (2 channels only) • By default cameras will add 1 fisheye, 3 Panorama and 4 Active streams (8 channels). <p>10 Axis Fisheye camera limitation: Due to a camera limitation, the Axis Fisheye camera may take several seconds to display Live video on the victor surveillance pane.</p> <p>11 Work around: Due to a camera limitation, the camera will only stream at a very low FPS when all streams are active. Because of low FPS of the camera, especially on a busy network, this may result in a delay in live video or a loss of video for several seconds. The User can minimise this impact, by reducing the GOV length on the camera webpage from the default parameter of 13 to a lower value (ie 4 or 5). To change this setting Navigate to the Axis webpage , go to Setup > Video > Video stream > Overview H264 > Encoder setting > GOV length</p> <p>12 After a cable pull the edge alarms do not display please disable and re enable the</p>

Model	Limitation
	edge alarms on the VideoEdge.
Q6035	If running a sequence overnight, it is recommended to use a FPS>5 setting. If saved at a lower FPS, any frame rate drops may cause the video to freeze during sequence run. The auto focus on this camera is not working when the camera is zoomed in or zoomed out.
Q7436	Using Pelco analog camera: only supports continuous operations, it does not support relative operations, and it will respond slowly, usually a delay 3s after doing PTZ operations.
Q1615	The audio bitrate option is inconsistent with the camera web page when audio codec is set to AAC or G726. Image rotation on the camera should be set and the camera rebooted before adding to the VideoEdge.
Q1615, P1428-E	When setting CBR values on VideoEdge web page it does not take effect, for example, if CBR is set to 2000 on VideoEdge web page, the bitrate of stream is still 3300.
F44	There is one dry contact channel that fails to work on the F44 camera model if a user enables all available dry contact channels. The 'enable/disable' message does not reflect the amount of dry contacts available. For the F44 encoder, it is recommended that the user only enables the first three dry contact channels due to a camera limitation. Only 1 channel works for edge based motion. Only enable 1 channel. i.e. channel 3. Do not enable 1,2 or 4 to get alarms for channel 3.
P5515	Image rotation on the camera should be set and the camera rebooted before adding to the VideoEdge.
Q1659	When in low light conditions the Q1659 may experience instances of video loss. Please install handler 4.9.1.2006 to reduce the amount of video loss.

Known Issues

Model	Issue
P1357	The maximum FPS changes according to how the camera is configured. See camera user manual.
M3007	<ol style="list-style-type: none"> 1 The "Mount Type" is not shown on VideoEdge. 2 Due to a camera firmware issue, after restarting the camera, channel 8 restores to default settings.
P1357, M3007	Stream settings should be configured on VideoEdge before enabling Edge Based Motion Detection. Once added to the VideoEdge and enabled, changing the settings may cause video stream lost. If this issue occurs, The camera must be removed from the VideoEdge, factory defaulted and re-added to the VideoEdge.
All cameras	Should a camera become disconnected from the network for an extended period of time

Model	Issue
	(More than 12 hours) the VideoEdge may not receive edge based motion events/ dry contact events. If this occurs it may be necessary to disable and re-enable dry contacts and edge based motion detection again via the VideoEdge admin client. If the camera firmware is 6.10 or above then the camera should be deleted from the VideoEdge and re-added again.
All Cameras V5.75 and above	An Axis has changed its default HTTP setting to HTTP Digest (Medium) a security group needs to be created with the HTTP digest setting to add the camera to the VideoEdge. If the camera is already on the VideoEdge it must be moved to a security group with these setting, if the correct security group is not used it could cause streaming and recording issues.
All Axis cameras with VMD3 and VMD4	Axis cameras with firmware version 6.50.xx or above support VMD3 and VMD4. - If current app running is VMD4, this only supports motion alarms in VideoEdge integration without motion metadata. - If current running app is VMD3, this supports motion alarm and motion metadata in VideoEdge integration.

Special Points

- 1 For some old cameras with camera firmware prior to v5.80, its default authentication type is 'BASIC', so the User will need to add them using a new "BASIC" security group on the VideoEdge.
- 2 Motion detection of camera must be enabled before your EdgeBased testing. VMD3 replaces VMD2.1 starting from FW6.10, and the menu of motion enable is different to each motion detection.
 - Firmware Prior to v6.10 is VMD2.1: Detector->Motion Detection->Add Window
 - Firmware from v6.10 is VMD3: Application->Motion Detection 3->Settings->AXIS Video Motion Detection settings
- 3 For some cameras, the alarm can be configurated as alarm input (DryContact) also as alarm output (RelayOut). The mapping from camera to VideoEdge are:
 - AlarmOut Index = RelayOut Index + DryConact Number + 1;
 - The sequence of alarm in and alarm out must not be interlaced, and alarm in is must prior to alarm out. For example:
 - Valid combination:
 - Alarm 1 -> Alarm in
 - Alarm 2 -> Alarm in
 - Alarm 3 -> Alarm out
 - Alarm 4 -> Alarm out
 - Invalid combination:
 - Alarm 1 -> Alarm in
 - Alarm 2 -> Alarm out
 - Alarm 3 -> Alarm in
 - Alarm 4 -> Alarm out
 - OR
 - Alarm 1 -> Alarm out
 - Alarm 2 -> Alarm in

- Alarm 3 -> Alarm in
- Alarm 4 -> Alarm out

- 4 For F44 encoder, it is recommended that the user only enables the first two dry contact channels due to a camera limitation. An Axis case number has been opened : 615018
- 5 For multi-sensor cameras and encoders, it is not recommended to enable all motion detection for all channels due to a camera performance limitation.

Note:

Please refer to AXIS cameras release notes published on the AXIS website for more information about AXIS cameras and limitations.

Supported Key Functions

- Video Stream
- Query Device
- Audio Stream
- Events
- PTZ

Video Stream

- Supports MJPEG and H.264 streams
- VideoEdge supports dual H.264, or one H.264 and one MJPEG

Audio Stream

- Supports audio codec G.711
- Audio stream is mixed with video stream

Dry Contact Event

- Supports polling mode at a 250ms interval

Edge Motion Detection Event Feature

- Supports polling mode at a 100ms interval

PTZ Methods

- Supports pan, tilt, zoom and preset

Get/Set Properties

- Get/Set property: Please refer to the encoder profile, below properties need the config file (for DB support)
 - VideoCodecFrameRate(MJPEG & H264)
 - VideoCodecQuality (MJPEG)
 - VideoCodecBitRate (MJPEG & H264)
 - VideoCodecResolution (MJPEG & H264)

Unsupported Key Functions

- Reboot

- Power Off
- Get Log
- Factory Defaults
- Find Device

Default Ports

- Port 80 for HTTP
- Port 554 for RTSP

Default Username & Password

- Username: service
- Password: <no password required>

Supported Resolutions

Model	Max Resolution (Default Value)	Resolution List in VideoEdge 4.2+
AutoDome JR800 HD	1280x720	1280x720, 4CIF, CIF
Dinion NBN-498-P IVA	4CIF	4CIF, CIF
Dinion HD 1080p D/N IVA	1920x1080	1920x1080, 1280x720, 4CIF, 704x432, 512x288, CIF, 256x144
Dinion NBN-921-P IVA	1280x720	1280x720, 4CIF, CIF
NBC-265-P	1280x720	1280x720, 4CIF, CIF
AutoDome 800 HD	1280x720	1280x720, 4CIF, CIF
VG4 AutoDome	4CIF	4CIF, CIF

Limitations

- For the Bosch 1-Channel Encoder - VIP-X1-XF-IVA, when using victor client for instant playback, the rewind button when clicked will show a frozen screen (due to large GOP sizes). Therefore to see video on instant playback, for rewind, you can use the jump back button and then play forward. Recorded video is not impacted.
- For the Bosch encoder VIP-X1600 Series and VIDEOJET multi 4000, all 16 channels will use the same 3 video profiles, the video settings are set as H264 stream 1, H264 stream 2, and MJPEG stream 1. Therefore any change in the stream configurations of any channel will change it for all other 15 channels. All channel configurations are tied together.
- Only 4CIF resolution is supported on the MJPEG stream. This is the only resolution supported by the encoder.
- The resolution drop down on VideoEdge displays 2/3 D1 but is in fact a smaller resolution than 4CIF. This is an encoder limitation.

- When using any resolution above CIF this may result in video loss. To prevent video loss please set your FPS to only 12 or 15. If 25 or 30 FPS is used this will also result in video loss using a resolution above CIF this is a Bosch limitation.
- When changing the video configuration on VideoEdge of channel one it changes all channels on the Encoder. However not all video streams that are displayed in victor are changed. Please remove the Encoder and re-add or make the configuration changes on the Encoder webpage. This is the encoder limitation.
- Due to a camera limitation, the handler can only support one MJPEG stream. If a second MJPEG stream is enabled, the VideoEdge will produce an error message.
- Bosch camera supports two H.264 streams. Handler default stream is H.264 stream 1. Due to camera limitations, H.264 stream 2 resolutions depends on H.264 stream 1 resolution.

Note:

H.264 stream 1 and stream 2 refer to H.264 streams from the camera corresponding with the camera encoder profile 1 and profile 2, not streams 1 and 2 on the VideoEdge.

Resolution List on H.264 Stream 1	Current Value of H.264 Stream 1	Resolution List on H.264 Stream 2	Resolution List on MJPEG Stream
1920x1080 1280x720 4CIF 704x432 512x288 CIF 256x144	1920x1080	1920x1080 1280x720 4CIF 704x432 512x288 CIF 256x144	1920x1080 1280x720 4CIF 704x432 512x288 CIF 256x144
1920x1080 1280x720 4CIF 704x432 512x288 CIF 256x144	1280x720	1280x720 4CIF 704x432 512x288 CIF 256x144	1280x720 4CIF 704x432 512x288 CIF 256x144
1920x1080 1280x720 4CIF 704x432 512x288 CIF 256x144	4CIF or below	4CIF 704x432 512x288 CIF 256x144	4CIF 704x432 512x288 CIF 256x144

From the table above, the resolution on both H.264 stream 2 and MJPEG stream must be equal or less than H.264 stream 1. This means, when changing H.264 stream 1 resolution to a smaller one, ensure it is equal to or less than the resolution on both H.264 stream 2 and MJPEG stream.

- Due to a camera limitation, if the user starts MJPEG stream or H.264 stream2 with HD resolution, please make sure H.264 stream 1 resolution is equal to or higher than the resolution on MJPEG stream or H.264 stream 2.
- Bosch has implemented the CGI to get the Camera Type instead of the Model name labeled on the camera. So the Camera Type is shown in the model list on the VideoEdge.

- Bosch cameras do not support changing the Video Standard, only viewing the Standard. Bosch cameras have 3 Video Standards: NTSC, PAL and HD. If the camera video standard is HD, “UNKNOWN” will be displayed on the VideoEdge Camera Image Settings page.
- When setting up Dry Contacts on NBN-921-P IVA serials and NBN-498 serials, it is necessary to activate the Alarm Inputs on the camera GUI first. Users must change the Active dropdown list value from 'None' to 'N.O.' or 'N.C.' on the camera, as 'None' means disabled and this does not automatically change when Dry Contacts are activated on the VideoEdge.
- Due to a camera limitation, for Bosch Dinion HD 1080P D/N IVA, if the users sets stream 1 codec H.264 and 30 FPS, stream 2 codec H.264 then the streams can only reach 10 FPS, due to stream 2 being dependent on stream 1.
- Handler supports Generic functions including dual stream and audio stream with the following limitations:
 - Cameras need to provide three streams, including two H.264 streams and one MJPEG stream. So the handler can support dual H.264 streams or one H.264 stream and one MJPEG stream.
 - Resolution list includes HD resolution (1080P and 720P) and SD resolution (CIF and 4CIF), but cameras may only support one or several of them.
 - Audio codec G711 can be supported by the audio stream, other codecs are not supported.
- It is found that different camera firmware versions can return different camera types. This causes the handler to recognize the camera as Generic camera. Please ensure the Bosch camera has the recommended firmware version before adding it to the VideoEdge.
- Due to camera limitations on the AutoDome Jr 800 HD, it supports single H.264 stream when the resolution is set to 1080P or 720P 50 (PAL)/60 (NTSC) FPS on H.264 stream 1, and H.264 stream 2 is only a copy of H.264 stream 1 when 1080P is selected for stream 1. It supports dual H.264 streams when resolution and FPS are set to 720P and 25 (PAL)/30 (NTSC) FPS or below, and H.264 stream 2 can be set to 4CIF and CIF resolution.
- Due to camera limitation, when setting 1080P for MJPEG stream on the Autodome Jr 800HD, it is shows 1920x1072.
- If observing some delay in live and recorded video on victor Client – we recommend configuring the settings on camera GUI as:

Go to Settings/advanced/camera/encoder profile/Profile 1/Expert settings:

- GOP structure = IP
- I frame distance = set slider to the same FPS value configured on the VideoEdge.
- Due to a camera issue for some Bosch cameras, for example Auto Dome Easy II IP, the camera has an interlacing issue when using 4CIF resolution. In order to resolve the issue, the camera must be set to CIF resolution (on both the camera GUI (Settings/advanced/camera/encoder profile/Profile 1/Video resolution) and VideoEdge video stream configuration).
- Bosch Dinion HD 1080p D/N IVA - After a camera has been factory defaulted, the user should change the property of camera stream 2 from 'Copy Stream 1' to 'H264 MP SD' (This can be done on the camera web page Settings > Advanced Mode > Camera > Encoder Streams > Video1> H264 settings>) the camera can then be added to the VideoEdge.

Known Issues

- After the power has been disconnected to the Bosch camera and re-connected the audio may not return please disable and re-enable the audio via VideoEdge admin webpage.

- Edge based motion alarms are only triggered on one channel of the encoder, not all channels will receive the alarms. This is due to a VideoEdge known issues and is fixed in in VidoeEdge 5.0 and later. This is fixed in handler 5.0.0.13002
- Analytic heat map is not supported for on the Bosch encoders.
- The FPS is only 2.75 when MJPEG streaming (25 fps) is in use. It is a known camera limitation. Confirmed with Bosch support that for most of the Bosch cameras FPS can only reach up to 5 FPS.
- Audio and video is not synchronized with MJPEG stream on victor client. This is due to the MJPEG stream limitation on the FPS only reaching a low rate.
- When setting Brightness and Contrast on the NBC-265-P, it returns an error message. This is because it uses different CGI from other cameras, so these properties and functions are not supported.
- Frequent Video Loss for Bosch Dinion HD 1080p D/N IVA is caused by the default VideoEdge storage setting. The recommended mount option when setting up the VideoEdge is:
nofail,noatime,nodiratime,attr2,nobarrier,noquota,allocsize=4M
- GOP structure should be set to "IP" prior to adding cameras to VideoEdge. Failure to configure this setting may cause videoloss or issues with victor playback.
- If the network connection between the VideoEdge and the camera drops and then established again, this may result in the camera/device not restarting correctly. The camera should be restarted
- Due to a VideoEdge web client known Issue, when Stream 2 is enabled with the same codec as Stream 1, the setting is a copy of the Stream 1 settings. But Bosch dual H.264 stream support has a different resolution list. So when the client applies, it shows and applies a different resolution value on Stream 2.
- Due to the VideoEdge web client known issue, when setting the resolution for the second H.264 stream, set it on the advance edit page. This is due to the fact it is a copy setting of H.264 stream 1 on camera list page with editing status, and real available resolution may not be included in the copy of the resolution list.
- Due to camera known issue, for Dinion HD 1080P D/N IVA camera, set resolution 4CIF (704x480) on H.264 Stream 1 and 768x432 on H.264 Stream 2, then the user only can get an actual resolution 704x432 for H.264 Stream 1. And set resolution 768x432 on H.264 Stream 1 and 4CIF (704x480) on H.264 Stream 2, user can only get actual resolution of 704x432 for H.264 Stream 1.
- There is a green line at top of victor Unified Client live stream on Bosch AutoDome Jr 800HD. This is a camera issue.
- Playback video stuttering when rewinding/forwarding the H.264 video from AutoDome 800 Jr. The camera setting is: NTSC, H.264, 1920x1080, FPS=30. Camera's firmware version is 39500570.
- When running on a VideoEdge with a Haswell hardware chipset, The Bosch AutoDome Jr Camera Model will not stream video in a 2x2 surveillance window if it is transcoded to the resolution of 416 X 240. All other transcodes and resolutions will stream as expected.
- Dual H264 streams are not fully supported on the Bosch MIC IP dynamic 7000 HD camera. It's a camera limitation. The FPS of the second H264 stream cannot reach the set value when the first stream is 'H264 MP 1080P 25/30 Fixed'. Please refer to the camera data sheet 'http://resource.boschsecurity.us/documents/MIC_IP_dynamic_7000__Data_sheet_enUS_16950850955.pdf' for the detailed stream options.
- Bosch MIC IP dynamic 7000 HD camera needs an accessory 'MIC7000 Alarm/Washer Interface Unit' to support its dry contact inputs. Totally 6 dry contact inputs will be shown on VideoEdge alerts page, but only first 4 of them are real dry contact inputs and the left 2 are temper alarm inputs.
- The PTZ presets function and other functions of Bosch MIC IP dynamic 7000 HD camera may not work correctly until an enough power supply is provided.
- Bosch Dinion HD 1080p D/N IVA - Live video and instant playback may show a slight stutter or skip for 1 second. Recorded video does not display the issue.

Special Points

- When using an analog PTZ camera via the encoder please ensure the PTZ address on the camera corresponds with the channel used on the encoder. For example if the camera is attached to channel 3 then the PTZ address on the camera must be 3.
- Bosch camera has 8 profile configurations on the web page, and each profile may configure a set of codec parameters. Handler specifies H.264 Stream 1 on camera to profile Configure 1 and H.264 Stream 2 on camera to profile Configure 2 and the MJPEG stream on camera to profile Configure 3, so when the VideoEdge sets stream codec parameters, the parameter is written in the special profile configured.
- Changes to codec parameters should only be made on the VideoEdge web GUI and not the camera web page as they may not be implemented.
- The ranges of Brightness and Contrast are 0-255 in Bosch cameras. The Handler converts this value to 0-100 using the following formulae:

Camera to VideoEdge: $Camera (brightness/contrast) * 100 / 255$

VideoEdge to camera: $VideoEdge (brightness/contrast) * 255 / 100$

- When adding the camera to the VideoEdge, the GOP structure must be set to "IP" in profile configure of the camera web page, so the FPS value is usable.
- When enabling audio stream on VideoEdge for all Bosch cameras, ensure audio is enabled on camera web GUI.
- Some cameras may not contain "-" or "." or spaces between the MAC address on the VideoEdge properties page. This is only a cosmetic issue.
- The presets/scenes must be set for the Edge Motion Detection to trigger. This applies to Bosch AutoDome 800 HD and the Bosch MIC IP Dynamic 7000 HD cameras. For more information, see the 'Motion Operation Manual' at (http://resource.boschsecurity.com/documents/MOTION__Operation_Manual_enUS_19406483595.pdf). It states the following: "*You must move the camera to the required position first in each case. When using AUTODOME cameras, the individual presets must be specified before configuring MOTION+ for each preset. All of the settings you make relate to the selected camera position. This means that you must reconfigure MOTION+ for this camera whenever you change the camera's direction or position.*"

Supported Key Functions

- Video Streaming – Single and Dual
- MJPEG and H.264 video codecs
- Query Device

Unsupported Key Functions

- PTZ Operation
- Audio Streaming
- Dry Contact Events
- Power off devices
- Get device log
- Find Devices
- Reboot
- Reset to factory default

Camera Serial Number

- VideoEdge will use the cameras MAC address as the camera serial number.

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: <no password required>

Supported Resolution

Model	Max Resolution	Resolution Options on VideoEdge
MP1A	1280x1024	1280x1024 / 640x512
MP1DN	1280x1024	1280x1024 / 640x512
MP2A	1600x1200	1600x1200 / 800x600
MP2DN	1600x1200	1600x1200 / 800x600

Model	Max Resolution	Resolution Options on VideoEdge
MP3DN	2048x1536	2048x1536 / 1024x768 (For MJPEG – only 1024x768)
MP5A	2560x1920	2560x1920 / 1280x960
MP5DN	2560x1920	2560x1920 / 1280x960 (For MJPEG – only 1280x960)
MP8D-L4	1600x1200	1600x1200 / 800x600

Limitations

Note:

Refer to Limitations stated for Arecont Vision as they also apply for CBC products.

- The CBC MP2 model and other CBC models may not be discovered via the auto discovery feature. The CBC cameras should be added manually.
- Due to a VideoEdge limitation, motion detection only handles resolutions of up to 1280x960 for AV1XXX, AV8XXX, AV2100, AV2105 and AV2110, motion detection can only handle resolution as half.
- Due to a camera limitation, for CBC cameras all MJPEG only cameras (Arecont: AVxx00, AV8180, AV8360 – CBC: MP1A, MP2A, MP5A and MP8D-L4) will stream at a higher FPS (reaching max FPS) when setting to 15FPS. FPS of 14 and lower are not affected by this issue.
- When upgrading to latest camera handler pack, note that the parameters of video streams may be changed to the default values. It is recommended to recheck video codec parameters when upgrading or restoring configuration backups.

Known Issues

Note:

Refer to Known Issues stated for Arecont Vision as they also apply for CBC products.

- Live view and playback streaming (instant playback) on the VideoEdge does not "pace" delivery of large amounts of data well, causing overflows in network buffers at the VideoEdge Client. This issue is more noticeable when using higher bitrate cameras and will cause skipping in live video and playback on the VideoEdge Client. For video retrieval on higher bitrate cameras it is advisable to search and retrieve the clip, this will display the recorded video without this issue.
- VideoEdge receiving H.264 with timestamp prior to last one received. This is a firmware issue. Beta firmware has been received from Arecont and resolved the issue, awaiting formal release (Arecont Ticket: TECHSUP: 15516).

Special Points

CBC model cameras with firmware version 62414 will be configured as their Arecont equivalent, also taking the Arecont model. In firmware 64238 CBC model cameras will be identified as a CBC model, but for codec parameters. CBC model cameras still correspond with Arecont model cameras.

Supported Key Functions

- Video Streaming - Single and Dual
 - Video Codec - H.264, MJPEG
- Audio Streaming
 - Audio Codec - G711A, G711U, G726, AAC
- PTZ
- Dry Contact Events
- Query Device
- Edge Device Motion Detection
- Edge Device Face Detection

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: admin

Supported Camera Firmware & Models

Model	Minimum Camera Firmware Version
IPC-HFW4231SP	2.460.0000000.16.R,build:2017-09-04
IPC-HDBW2421RP-ZS	2.620.0000002.0.R,build:2017-08-30
IPC-HFW5431EP-Z	2.460.0000000.16.R,build:2017-09-04
IPC-EBW81230P	2.600.0000.3.R,build:2017-08-30
SD5943OU-HNI	2.600.0000000.10.R,build:2017-09-06
NVS0104HDC	3.210.0001.6,build:2017-01-03

Note:

The Dahua camera handler supports Generic camera for those unlisted models. If one camera is not in the supported list but compatible with the Dahua CGI interface "DAHUA_HTTP_API_V2.11", it can be supported as a Generic camera.

Camera Serial Number

VideoEdge will use the camera's MAC address as the camera serial number.

Video Stream Feature

The specific Video stream feature characteristics by model families are:

Model Family	Video Stream Feature
All Models	Dual Stream: H.264, MJPEG
Generic	Dual Stream: H.264, MJPEG

Audio Stream Feature

The specific Audio stream feature characteristics by model families are:

Model Family	Audio Stream Feature
All Models	Dynamically acquire from camera
Generic	Dynamically acquire from camera

Note:

Dahua camera's audio stream is mixed with video stream, handler demux audio stream from "Video Stream 1".

Event Stream Feature

The handler uses HTTP polling mode to get the dry contact status. The maximum number of dry contact events supported by each camera family:

Model Family	Max # of Dry Contact Supported
All Models	Dynamically acquire from camera
Generic	Dynamically acquire from camera

Special Points

- When you first log in to the NVS, you must change the password and the password can't be the same as the username, therefore a security group is required to be created on VideoEdge before you can add the NVS to VideoEdge.
- This handler will support Edge device Motion Detection directly from the camera.
- User needs to enable Edge based motion detection on the camera Web GUI before enabling on the VideoEdge.
- Camera Audio and Dry Contact will need enabled on the camera prior to enabling these on the VideoEdge, as the handler cannot directly enable these features

- The Camera handler will report an incorrect Bitrate range of 1 ~ 32000 Kbps (camera issue) its suggested user refers to camera Web GUI to determine correct supported bitrate range (1~24000 Kbps). If an incorrect Bitrate is set via the VideoEdge the camera will retain the previous valid bitrate setting and may not display the correct value on the VideoEdge GUI
- On the VideoEdge "Function & Streams" page, Stream 1 is associated to camera's "Main Stream" profile; Stream 2 is associated to camera's "Sub Stream" profile.
- Camera is set to auto-reboot for 60 seconds by 2:00AM everyday by default setting (this will result in a 60 seconds video loss), however this can be disable in camera Web GUI.

Limitations

Model	Limitations	Work Around
IPC- HFW4231SP IPC- HDBW2421RP- ZS IPC- HFW5431EP-Z. IPC- EBW81230P SD5943OU- HNI NVS0104HDC	Camera model will display as Generic with the latest Dahua Handler.	Upgrade the Firmware to the Firmware versions listed in the Supported Camera Firmware & Models table.
All	Camera Firmware issue: All camera resolutions cannot be changed from the VideoEdge Admin webpage.	To change the resolution on the cameras, navigate to the camera webpage, select Camera > Video, and save the new resolution value. This will update the resolution on the VideoEdge Admin webpage.
	The cameras FPS on stream 1 cannot be less than stream 2. Reason: Camera Limitation	Set the FPS on stream 1 to a higher FPS value than what is set on Stream 2.
	Stream 2 (MJPEG) quality may be reduce automatically when dual streaming at high resolution. Reason: Camera limitation	User can control Bitrate in the camera WebGUI to ensure the MJPEG's image quality is acceptable.
	MJPEG quality will not display on VideoEdge web page however camera will not support it - to control MJPEG use camera web GUI Bitrate setting.	
HDB3300, HFW3202C	There will be periodic frame loss when dual stream is enabled with these settings (H264 25fps/1080P + MJPEG 25fps/D1 +audio).	Lowering MJPEG will prevent a high loss of FPS
HFW3202C	When camera is set to dual stream, user will observed missing frame during test due to low FPS. Reason: Camera limitation	Lowering MJPEG will prevent a high loss of FPS
	FPS will drop and mosaic image will be observed when user triggers Dry Contacts. Reason: Camera limitation	N/A
	FPS for both codec will be reduced when dual	N/A

Model	Limitations	Work Around
	steam enabled. Reason: Camera limitation	
	Due to camera limitations the resolution settings available depend on the bitrate settings configured. See recommended settings for H264. MJPEG bitrate settings cannot be changed via the VideoEdge.	For Codec H264: Recommended Bitrate settings for a good quality image – please configure as required: For Resolutions at 4CIF the best bitrate is 4096 as set by VE NVR GUI. For Resolutions at 1280 X 720 Bitrates should be set to 8192 as set by VE NVR GUI. For Resolutions at 1280 X 960 Bitrates should be set to 8192 as set by VE NVR GUI. MJPEG bitrate settings should be set via the camera GUI before adding the camera to the VideoEdge.
NVS.	Due to the Dahua lock policy where you are required to change the camera password, when using auto discovery after a password change, there will be instances of “UNKNOWN” to be displayed for the camera properties on VideoEdge. This is due to the failed attempts for VideoEdge auto discovery to query the camera but the password has been changed on set up. This is due to Dahua lock out policy and is seen if the default password is changed and auto-discovery is enabled on the VideoEdge.	To limit the problem caused by this issue please disable auto-discovery

Known Issues

Model	Known Issue	Work Around
All	The FW shows as empty in the camera list. Reason: Camera issue	N/A
	Camera Web GUI H264 Bitrate different from CGI's return when user set an invalid Bitrate to camera. Camera will not report error. Reason: Camera issue	It's suggested user refers to camera Web GUI to determine correct supported bitrate range
	Users may not be able to apply large incremental FPS changes at one go. Reason: This is a camera issue.	Change the FPS using smaller increments, for example, 30fps > 20fps > 15fps > 10fps
	When adding a camera which is very slow like IPC-HDB33000 to the VE NVR, it may report a "No VE Text response after waiting 5000 milliseconds" but action will still be successful. Note: This will also cause the issue in TFS104504-when add IP camera with default association, audio cannot be added successfully together. Reason: Camera issue	N/A
	VE NVR web page may report "Server error"/VE NVR generate core file when user operate some	User should go back to the previous page to configure it again.

Model	Known Issue	Work Around
	camera which is very slow like HDB3300.	
	VE NVR web may show "server error" when user is trying to access the following tabs: Alerts, Function & Stream, and Image Settings.	User should navigate back to the previous page and try again.
	AV is out of syncs during live view on both audio codecs (G.711a and G.711u) in VE Hybrid local client.	N/A
	Search and retrieve in victor sometimes fail, many "exportClip" process will be generated and VE NVR CPU will reach to 100%	N/A
	When enabling VE NVR "Motion Detection" from a single stream configuration, the webpage may report "server error" with a core dump file but motion detection we still work.	User should enable the 2nd MJPEG stream manually before enable VE NVR "Motion Detection" functions
	During test we experienced audio [PCMA] loss (40%) when checking VE NVR audio record statistics. Reason: Camera issue	User should use PCMU for live only, If user wants to record video we recommend using PCMA.
	When Edge based is enabled and user deletes the camera, the camera shows as "Unknown" in the Video List and stream will not display in victor unified client.	Restart the VE NVR Services in the VE NVR Web GUI (VE NVR Web GUI>Advanced>Shutdown>Restart VE NVR Services>Apply)
	There is no auto-configured second stream when the camera is first added to the NVR after being factor defaulted	There are 3 options: 1. Delete and re-add the camera 2. Enable stream 2 manually 3. Disable and re-enable auto-configuration
SD6582A-HN	When adding the camera into VE NVR, the module name shows as "SD65XX-HN" in the VE NVR. Reason: Camera issue	N/A
	Video contrast cannot be modified through VE NVR Image Settings. Reason: Camera issue	User should set the video contrast in the camera Web GUI.
	The camera cannot be added into VE NVR using personalized password groups Reason: Camera issue	Always use default password for this camera
SD6582A-HN, IPC-K100W	Audio [PCMA]/video are not synced in Search and Retrieve or downloaded clip from Victor Client. Reason: Camera issue	User should use PCMU for live only, If user wants to record video we recommend using PCMA
	[Bug 105073] When 2 alarms are triggered simultaneously, only one alarm event will be notified in the victor Client Activity log. Reason: Camera issue	N/A
HDB3300	When Search and retrieving clip in victor, video & audio cannot be retrieved successfully.	N/A
	When associating audio to video on this camera VE	User should refresh the VE NVR web page.

Model	Known Issue	Work Around
	NVR may report "cannot update resource stream parameters" error but the action will still be successful.	
HFW3202C	We are unable to support Zoom functionality on this camera - buttons may show but this will not work as expected. Reason: Camera issue	N/A
	We do not support Focus functionality on this camera	User should perform focus adjustments on the camera Web GUI.
IPC-K100W	The VE NVR will show the IPC-K100 model to incorrectly support 2 Dry Contact inputs when camera only has 1 Dry Contact input. Reason: Camera issue	User should ignore the 2nd Dry Contact input.
	On the Image Settings Page, the following Error message will state: "could not retrieve the video or lens properties" The Lens/Sensors Day/night dropdown is blank.	Configure the day/night settings via the camera web GUI: Camera GUI -> Setup -> Camera -> Conditions -> Day & Night. These settings will remain configured when the camera is added to the VE NVR.
HDB3300, HF3101	When adding IP camera with default association, audio cannot be added successfully together. Reason: Camera issue	Audio stream can be added separately and later associated to the camera. User should click the "Add New Device" button in the "Audio List" page and enter camera details. User can then associate the audio stream to the video stream manually from the "Function & Stream" page by selecting it from the "Associate Audio" dropdown list.
NVS	Edge based motion alarms are only triggered on one channel of the encoder, not all channels will receive the alarms. This is due to a VideoEdge known issue and is fixed in in VideoEdge 5.0 and later.	N/A

Supported Key Functions

- Video Streaming – Single and Dual
 - Video Codec –H.264, MJPEG, MP4V
- Audio Streaming
 - Audio codec supported depends on camera functionality
- PTZ
- Dry Contact Events
- Query Device
- Reboot Device

Unsupported Key Features

- Edge Motion and Metadata

Supported Camera API & Models

Model	Minimum Camera Firmware Version
Encoders E-ADE1C, E-ADE4C	V1.2.0.140801

Note:

Generic model is fully featured for unlisted models supporting dual video streaming, audio stream, PTZ, dry contact events and query device to discover camera capabilities. For specific models, the handler dynamically queries the capabilities from the camera.

Required Network Ports

- Port 443 is for HTTPS
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: admin256

Camera Serial Number

NVR will use the camera’s MAC address as the camera serial number.

Video Stream Feature

The specific Video stream feature characteristics by model families are:

Model Family	Video Stream Feature
E-ADE1C, E-ADE4C	Single/Dual stream supported codecs:H.264, MJPEG, MP4V
Generic	Depends on camera capability

Audio Stream Feature

The specific Audio stream feature characteristics by model families are:

Model Family	Audio Stream Feature
E-ADE1C, E-ADE4C	G711mulaw
Generic	Depends on camera capability

Event Stream Feature

Handler uses HTTPS polling mode to get the dry contact status. The maximum number of dry contact events supported by each camera family:

Model	Max # of Dry Contacts Supported
E-ADE1C	1
E-ADE4C	4
Generic	Depends on camera capability

Special Points

- 1 Before adding the camera into NVR, users should restore camera to factory default through camera web page. To Change the IP address if not known or set to default please use the camera IP tool that is supplied with the camera.
- 2 Before using Dry Contact Events function, users should configure alarm input "Arming Schedule" on the camera's web page via Configuration -> Alarm Settings -> Arming Schedule (for example, configure schedule to 7x24 hours.).
- 3 The Conversion from Camera GUI to NVR for MJPEG Quality are as follows:
 - Lowest -20
 - Lower - 30
 - Low - 45
 - Medium - 60
 - Higher - 75
 - Highest - 90

Limitations

Model	Limitations	Work Around
All	Can't change MJPEG quality on VideoEdge web page if the Bitrate Type is set to "Constant" on camera web page.	User should first go to camera web page change Bitrate Type from "Constant" to "Variable" (Configuration -> Video Settings -> Bitrate Type) before user can change MJPEG quality on NVR web page.
	Changing active state for dry contacts from the NVR web page will cause the encoder to reboot. The same behavior can be observed on the encoder's web page.	N/A – This is an encoder issue.

Known Issues

Model	Known Issues	Work Around
All	Patterns are not supported for UD8 due to an encoder limitation	N/A
All	PTZ Speed is slow when encoder is used with Bosch and Pelco cameras. This is an encoder issue.	This is only for the Victor/Local client dome control. User can use the keyboard or click and drag function through Victor/Local client to achieve faster PTZ speed for Pelco cameras. Bosch Camera PTZ cannot be made faster.
All	When the encoder is first added to the NVR the resolution of the second stream is set to the highest resolution.	For the User to enable motion detection the second stream configuration should be enabled and the resolution decreased before motion detection can be enabled.
E-ADE4C	When 2 or more cameras are connected to the encoder, the PTZ action is carried out on both cameras. This is an encoder issue as the encoder has an issue when two channels operate with the same baud rate.	User configures different baud rate for each PTZ channel by changing the baud rate for the selected "Channel No." (Configuration -> Serial Port Settings)
All	VideoEdge Auto Discovery Snapshot displays a grey screen	This maybe be displayed after refreshing the snapshot
E-ADE4C	Max FPS is determined by the camera connected to channel one. This will display as either 25FPS (PAL) or 30 FPS (NTSC) depending on what this camera supports. The FPS range on Channels 2-4 will match the fps range on Channel 1, no matter what the camera capability.	If one camera supports a higher Max FPS than other cameras on the encoder, it is recommended to add this to Channel 1.
All	At default for the cameras the I Frame Interval is set to 100, this may cause streaming issues for the 1 & 4 channel Encoder for playback function. To reduce the impact the User should modify the I Frame option on the Encoder Web GUI so it is in sync with the FPS value set on the camera.	To reduce the interval, access the encoders web GUI, navigate to: Configuration > Remote Configuration > Camera Settings > Video Settings edit "I Frame Interval" Set the I Frame Interval to the same value as the FPS

Supported Key Functions

- Video Streaming – Single and Dual
 - Video Codec - H.624, MJPEG and MPEG4
- PTZ
- Query Device
- Dry Contact Events
- Edge Device Motion Detection

Unsupported Key Functions

- Reset to factory default
- Audio Streaming
- Reboot Device

Required Ports

- Port 8090 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: fliradmin

Firmware Requirements

PT-602CZ	Nexus Server must be at least v2.5.32.0
Nexus Server F, D & PT-Series	Nexus server must be at least v2.5.17.14.
F, D & PT-Series	FLIR Camera Firmware must be ww1.4.1 or later with Tyco_VE44_Compatibility_patch.sh.
FC-S & FC-R Series	Nexus server must be at least v2.5.27.9
PT-HD Series	Nexus server must be at least v2.5.30.29
FC-ID Series	Nexus server must be at least v2.5.29.12
A310pt	Nexus server must be at least v2.5.29.3

Video Stream Feature

Dual streams are supported by all models.

For PT-Series, F-Series, D Series & A310pt, only MJPEG can be used for second stream whether single or dual streaming

Some FLIR Cameras require additional patch

Some FLIR cameras require additional patch Tyco_VE44_Compatibility_patch.sh, this patch applies to the following models and firmware versions:

- F-Series, WW1.4.1 firmware
- PT-Series, WW1.4.1 firmware
- D-Series, WW1.4.1 firmware

To install the additional patch, please follow the procedures out-lined below:

- a Upgrade the Camera Firmware to ww1.4.1
- b Upload the additional Patch (Tyco_VE44_Compatibility_patch.sh) after the camera is upgraded to ww1.4.1
- c Check the Firmware has upgraded.

Firmware Upgrade Procedure:

- 1 Upgrade the Camera Firmware to ww1.4.1
 - a Upgrade the FLIR camera using the FLIR Firmware Update Tool (FFUT) available for download in the FLIR website, <http://ns.flir.com> under the Downloads section. Install and run the FFUT, Follow the steps 1-4 below to upgrade camera:
 - b Setup: Click on “Setup” and select your camera models.
 - c Check for updates: Click on “Check for Updates” and the tool will connect to the Internet and download to your computer the latest firmware version for your camera models.
 - d Detect & Upgrade: Click on “Detect & Upgrade” my FLIR Device in order to discover the cameras on the network.
 - e Begin the upgrade: Select the camera model you want to upgrade and click on “Upgrade” to begin the upgrade.
- 2 Upgrade for installation site with no internet access:
 - a Download the firmware corresponding to the D-series/PT-Series/F-Series in your office to a PC which will be performing the installation.
 - b Go to settings and make sure the D-series/PT-Series/F-Series is checked.
 - c Go back to Check for updates and this process will download the firmware for this camera.
 - d Go to the installation site and click on Detect & Upgrade to search your camera.
 - e Select the camera and upgrade.

Or alternatively, contact FLIR support (nexus.support@flir.com) who will upgrade/provide support to upgrade the camera firmware:

- 3 Upload Tyco_VE44_Compatibility_patch.sh using the following steps:

- a Unzip file 141_Tyco_VE44
- b Access camera web interface
- c Select Maintenance -> Files -> Firmware
- d Stop Nexus Server via green control (Bottom left corner of camera web interface)
- e Scroll down Firmware page to Firmware section
- f Click Brown button
- g Select file Tyco_VE44_Compatibility_patch.sh
- h Select Upload button

This will take a few minutes and the web interface will not respond until the upload is complete. Camera will reboot.

4 To check if camera has upgrade correctly:

- a Wait for camera to reboot
- b Access camera web interface
- c Select Help -> Scroll down page

The following should be read below Hardware Information:

***Tyco VideoEdge 44 Compatibility Patch
Created on Thu Mar 27 2014***

Fixes & Enhancements

FLIR's F, PT, D Series cameras (refer to section "Some FLIR Cameras require additional patch") need to be upgraded with specified FLIR Release Firmware (ww.1.4.1 with the Tyco_VE44_Compatibility_patch and Nexus Server 2.5.17.14) to work with VideoEdge.

Nexus Server Version

2.5.17.14

FLIR Firmware Version

ww.1.4.1 with additional Tyco_VE44_Compatibility_patch

Fixed Issues & Enhancements

Issues	Root Cause & Resolution
Zoom in and Zoom out not working for the D/PT series camera as a result of firmware upgrade.	Required re-implementation of zoom support using new CGI command sequence which was recommended by FLIR.
PTZ controls not working for D/PT series cameras as a result of firmware upgrade.	Required adjustment to time of retry CGI commands.
Bit Rate Range on VideoEdge 4.4 is different to Camera Bit Rate Range.	VideoEdge Bit rate range required modification to correspond with camera bit rate range.

Known Issues & Limitations

Known Issues

Issue	Description	Comment
Camera issue: Edge motion detection is not supported for FC-644-ID camera.	It may trigger once when turned on, but no alerts will be received after the initial trigger.	Seems to be an issue with the camera or the firmware version.
When Zoom levels are set at minimum zoom for presets, switching between presets will not retain different zoom settings	Set up each preset with a minimum of +1 click zoom level across the presets	.
When FPS is set at 16 or above, the FPS will fluctuate based on the scene and environment for the FC-324-R camera.	Set the FPS to max 15, to reduce FPS fluctuation	The stream will not keep a steady FPS even with low camera CPU usage.
FC-R Models support Edge motion, spot temperature and area temperature but only one alert is received in victor.	If all three edge events are enabled only the first alarm enabled will be displayed in victor.	This means that only one edge alarm will work at once.
There are issues with PTZ on both PT/D-series models on local client on the VE Hybrid whereby the camera will occasionally freeze when PTZ controls are being used	The camera may freeze for a few seconds during PTZ movement on either the IR/DLTV lens.	This only happens on local client. The issues may be caused by slow decoding speed on local client.
Camera limitation: Dual streaming H264/H264 or MP4V/MP4V gives an error message; "Could not update stream 1 video codec" This is expected behavior due to the Camera limitation for Supported Codecs.	The camera does not support H264/H264 or MPEG4/MPEG4 combinations. Therefore the VideoEdge will provide an Error message as expected when a Users tries to configure these settings.	Due to the VideoEdge VE API limitation, the VideoEdge Web GUI will show all three resolutions on the 2 nd Stream. However only MJPEG is supported on the second stream and so only MJPEG as the second stream can be used for dual streaming. See table below stating the Supported Dual Stream Configurations & Resolutions
Issues with MP4V configuration for Single and Dual Streaming. If a User tries to configure the MP4V Stream for Single or Dual Streaming Configuration the settings may not apply.	MP4V codec configuration for Single or Dual Streaming may not configure correctly.	Users are recommended to limit the codec settings to H264 and MJPEG. Users are not recommended to use MP4V codec for Single or Dual Streaming configuration. Please refer to the table below on the Limitation on Configuring on MP4V Codec for Single or Dual Stream(s)
For D-series, PT-Series and F-Series cameras, the resolution list on the VideoEdge is not correct for the second stream (MJPEG).	Due to changes to the supported resolutions of 2 nd stream on both IR/DLTV Lens, unsupported resolutions appear in the resolution list for the second stream.	See table below stating the Supported Dual Stream Configurations & Resolutions.
Users should only open one preset control at a time.	When adding/editing presets on IR/DLTV lens, user must close the preset controls on the other lens.	
MJPEG stream appears blank when you add second stream with different video standard.	Stream #2's resolution is blank when stream #1 and stream #2's video standard is different i.e: Stream 0 = PAL	Camera should not be configured to different video standards on each stream as this is not supported by FLIR cameras.

Issue	Description	Comment
	Stream 1 = NTSC	
When enabling motion detection the second stream is automatically configured to MP4V.	The second stream must then be manually changed to MJPEG. Click edit > change the codec on the second stream to MJPEG> Click save.	This is a Quick Time issue
F Series Model shows different resolution in Quick Time than resolutions which has been set on VideoEdge	When camera is opened on Quick Time resolution is incorrect	

Camera Limitations

	Camera Limitation
Camera issue: The Pan and Tilt controls may become unresponsive intermittently on the D-Series cameras. This is also on the camera GUI.	Camera issue which FLIR have created a patch for in ww1.4.1 Compatibility Patch firmware which resolved the issue in Nexus Server 2.5.17.14. Please ensure the “Tyco_VE44_Compatibility_patch” is installed on top of the ww1.4.1 firmware.
The updated FLIR cameras with Camera Firmware version ww1.4.1 has the NTSC/PAL Suffix removed from the camera.	The handler has been updated to reflect the extension removal as part of the camera firmware release: ww1.4.1 The suffix extensions have also been resolved by the ww1.4.1 Compatibility Patch.
IR/DLTV lens for all D/PT/F-series cameras support MJPEG only as 2 nd stream. This is due to the change in Camera firmware version ww1.4.1	The FLIR cameras with Firmware version 1.4.1 will only support MJPEG as its second stream. This is the only second stream codec that the FLIR camera supports. Therefore the supported dual stream combination on VideoEdge is: H264/MJPEG MJPEG/MJPEG MP4V/MJPEG Any other combination is NOT supported by the camera and the VideoEdge will produce an error message stating; “Could not update stream 1 video codec.”
D/PT/F series cameras only. The camera GUI video profiles work as following to reflect the different streams: Video 0/1 refers to stream 1 and 2 of the IR video. Video 2/3 refers to stream 1 and 2 of the DLTV video.	The following are the Video Profiles and supported configurations: Video 0: Configurable H264/MJPEG/MP4V IR stream Video 1: Non-Configurable MJPEG IR stream Video 2: Configurable H264/MJPEG/MP4V DLTV stream Video 3: Non-Configurable MJPEG DLTV stream
With cameras which have both an IR and DLTV lens, any changes on one stream will cause the camera to go offline on both streams for the new settings to take effect.	This is expected behavior of the camera as the Nexus Server restarts when stream settings are saved.
On device list page for D-324 the firmware is showing as	Camera issue: Cosmetic issue from the camera sending the

	Camera Limitation
2.5.13.3 instead of 2.5.16.0 which is reflected on the Camera Web GUI.	information to the VideoEdge.
Camera resolution 176x144 is no longer a resolution option on the VideoEdge for the F-Series camera. This is due to the new Camera Firmware ww1.4.1 which does not support this resolution.	See table below stating the Supported Dual Stream Configurations & Resolutions.
When streaming codec H264 at a low FPS/resolution, the camera does not stream a clear image; It may appear grey or black on Victor. After a while the image may appear as normal.	This is a camera limitation as the camera does not stream when configured to these settings.

Compatibility Issues

	Compatibility issue as result of upgrade
Camera Nexus CGI interface and web service share same port: 8090	User must close the Camera web GUI before adding FLIR cameras to VideoEdge. Opening the camera GUI and running FLIR handler on VideoEdge at the same time may affect CGI communications between the camera and VideoEdge causing video loss or other undesired results.

Supported Dual Stream Combinations & Resolutions

Camera	Video Standard	Stream 1 Codec (Video Profile 0/2)	Stream 1 Resolution (Video Profile 0/2)	Stream 2 Codec (Video Profile 1/3)	Stream 2 Resolution (Video Profile 1/3)
D-Series PT-Series F-Series	NTSC	H264	720x480	MJPEG	640x480
		MJPEG	704x480		320x240
		MP4V	640x480		
			352x240		
	PAL	H264	720X576	MJPEG	704X576
			MJPEG		704X576
		MP4V	352X288		

Limitations on configuring MP4V codec for Single or Dual Stream(s)

In some cases due to camera limitations, the First and Second stream profiles may not support the same Codec, FPS and Resolution. When editing such streams on VideoEdge this may perform a stream swapping, where a swap of the stream index may occur. This will cause VideoEdge to swap stream 1 (which should usually index to the primary stream) to a secondary stream profile which will have specific limitations. This swap cannot be detected by the VideoEdge camera configuration page so both streams will give full configurable video configuration options.

For example for FLIR Cameras, Stream 1 supports 3 (H264/MP4V/MJPEG) codec but the Second stream only supports 1 (MJPEG) codec, the handler would try to do its best to maintain a stable resource to stream mapping. In some cases, the mapping may switch between Stream 1 and Stream 2. When the codec is selected on the first stream which supports H264/MP4V, stream swapping may occur causing the first stream to fail streaming H264/MP4V codec as H264/MP4V is not supported on the second stream.

Model	Description	Root Cause	Recommend Workaround
D-Series PT-Series F-Series FC-Series	<ol style="list-style-type: none"> This issue relates to MP4V configuration. This issue occurs if cameras only support a subset of H264/MJPEG/MP4V on camera 2nd stream. Note: The latest FLIR firmware (ww 1.4.1) only supports MJPEG on camera stream 2. Occasionally, changing codec from H264/MJPEG to MP4V on VideoEdge will not result on an actual stream configuration change in the camera. <p>Live view may not occur after camera re-boot after user applies the codec change to MP4V via VideoEdge's Camera Configuration Page.</p>	<ol style="list-style-type: none"> Camera handler provides camera Stream ID to VideoEdge based on the availability of a specific camera stream ID. Camera handler doesn't have any knowledge of the associated VideoEdge stream ID. Stream swapping may occur within VideoEdge system in the background as design. In the case when FLIR camera handler requests MP4V on camera stream 2, the camera will return "permission denied" as error. This is because MP4V is no longer a supported codec on camera stream for the latest FLIR camera firmware (ww1.4.1) <p>As a result, the codec change selected by user is rejected by camera. User will notice that Live View will not come back as expected after camera reboot.</p>	<p>User is recommended to limit the codec settings to H264 and MJPEG.</p> <p>If User has selected MP4V for any reason and finds the camera rejecting the change request, the User may try to re-add the camera to VideoEdge and re-configure camera to the desired stream settings.</p>

Supported Key Functions

- Video Streaming – Single and Dual
- Video Codec –H.264, MJPEG, MP4V
- Audio Streaming
- Audio Codec – G711mulaw
- PTZ
- Dry Contact Events
- Edge Based Motion Events
- Query Device
- Reboot Device

Unsupported Key Functions

- Profile Change
- VBR Bitrate Control

Supported Camera API & Models

Model	Minimum Camera Firmware
Fixed Camera DS-2CD4135F-IZ DS-2CD4132FWD-IZ	V5.2.2 build 140928
Fixed Camera DS-2CD2132F- I(W)(S) DS-2CD2120F- IWS	V5.2.3 build 141024
SpeedDome DS-2DF5284-A DS-6704HFI	V5.2.4 build 141009
Fisheye DS-2CD6362F-IVS	V5.0.9 build 141009
Encoder DS-6701HFI	V1.2.0 build 140414

Required Network Ports

- Port 443 is for HTTPS
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: 12345

Camera Serial Number

The NVR will use the camera's MAC address as the camera serial number.

Video Stream Feature

The specific video stream feature characteristics by model families are:

Model Family	Video Stream Feature
DS-6701HFI DS-6704HFI	Single stream H.264/MJPEG/MP4V Dual stream H.264/MJPEG/MP4V + H.264/MJPEG/MP4V
DS-2CD4132FWD-IZ DS-2DF5284-A	Single stream First stream H.264/MP4V Second stream H.264/MJPEG/MP4V Dual stream H.264/MP4V + H.264/MJPEG/MP4V
DS-2CD2120F-IWS DS-2CD4135F-IZ DS-2CD2132F-I(W)(S)	Single stream First stream H.264 Second stream H.264/MJPEG Dual stream H.264 + H264/MJPEG
DS-2CD6362F-IVS	Depends on camera source image mode
Generic	Depends on camera capability

Audio Stream Feature

The specific audio stream feature characteristics by model families are:

Model Family	Audio Stream Feature
All	G711mulaw
Generic	Depends on camera capability

Event Stream Feature

The handler uses HTTP pushing mode to get the dry contact status of each camera. The maximum number of dry contact events supported by each camera family are:

Model	Max # of Dry Contact Supported
DS-2CD2132F-I(W)(S), DS-2CD4132FWD-IZ, DS-2CD2120F-IWS, DS-2CD4135F-IZ,	1

Model	Max # of Dry Contact Supported
DS-2CD753F-E(I), DS-2CD853F-E(W) DS-2CD793PF(NF)-E(I)	
DS-2CD7264FWD-E(I)Z(H)(S)	0
DS-2CD6362F-IVS	1
DS-2DF5284-A	7
DS-6701HFI	1
DS-6704HFI	4
DS-6708HFI	8
Generic	Dynamically acquire from camera

Special Points

Before using Dry Contact Events and Edge Based Motion, users must first enable them on the camera's web GUI.

- 1 Dry Contact Events
 - a Set "Arming Schedule"
Advanced Configuration -> Basic Event -> Alarm Input -> Arming Schedule
 - b Enable "Notify Surveillance Center"
Advanced Configuration -> Basic Event -> Alarm Input -> Linkage Method -> Normal Linkage -> Notify Surveillance Center
- 2 Edge Based Motion
 - a Enable Motion Detection
Advanced Configuration -> Basic Event -> Motion Detection -> Enable Motion Detection
 - b Set motion detection area
Advanced Configuration -> Basic Event -> Motion Detection -> Draw Area
 - c Set "Arming Schedule"
Advanced Configuration -> Basic Event -> Motion Detection -> Arming Schedule
 - d Enable "Notify Surveillance Center"
Advanced Configuration -> Basic Event -> Motion Detection -> Linkage Method -> Normal Linkage -> Notify Surveillance Center
- 3 For the PTZ camera DS-2DF5284-A, if the user wants to control iris on victor client, they should change the Exposure Mode to "Manual" on camera's web GUI before adding to the NVR.
- 4 When the fisheye camera (DS-2CD636F-IVS) is first added to the NVR, there will be five channels, however this will not allow for streaming. The user can either delete the fisheye stream to allow for streaming on the other four channels or if they wish to use the fisheye stream, streams two to five should be deleted from the NVR.
- 5 Quality values are displayed as integers on the camera's web GUI, however the NVR uses six levels of quality to display these (Lowest – Highest). This is mapped depending on the values offered by the camera.

Limitations

Model	Limitations	Work around
DS-2CD2H55FWD-IZS DS-2TD2136-15 DS-2CD2635FWD-IZS	While the maximum resolution is set, the cameras will experience FPS fluctuation and video skipping if the FPS is set to 20, or below 6. Reason: Camera Limitation	Set the FPS to a value between 8 and 20, or use a resolution below the highest.
All models	The camera cannot be added when H264 is in use. Reason: Camera Limitation	The camera should be added using MJPEG. Then after the camera is added to the NVR the user can go back to the camera's web GUI and set the H264 profile which will then be applied on the NVR This issue is fixed in release 4.6.0.742
All models	If the user were to edit the bitrate control from VBR to CBR then to VBR, quality may be reset to its default value Reason: Camera Limitation	The user will have to manually change the quality setting via the NVR GUI
All models	If Bitrate is set to CBR on the camera's web GUI, the user will be unable to set MJPEG quality on the NVR Reason: Camera Limitation	The user should first go to the camera's web page and change Bitrate from CBR to VBR (Configuration -> Video Settings -> Bitrate Type). The user should now be able to edit the MJPEG quality
All encoders	Changing the state of the dry contacts feature will cause the encoder to reboot Reason: Encoder behavior	N/A
DS-2CD4132FWD-IZ	The FPS for stream 2 cannot be set to 22/25 while stream 1 is under the highest resolution Reason: Camera Limitation	Lower the resolution of stream 1 to enable a higher FPS on stream 2
DS-2CD4135F-IZ	The NVR doesn't support FPS 50 so this shouldn't be set on the camera Reason: Camera Limitation	N/A
DS-2CD2132F-I(W)(S) DS-2CD2120F-IWS DS-2CD4135F-IZ DS-2CD6362F-IVS	Wide Dynamic Range (WDR) should be enabled when the camera is added. Reason: Camera Limitation	WDR can be disabled after the camera is added to the NVR. On the camera's GUI go to Advanced Configuration -> Image -> Backlight Settings -> WDR. Once WDR is closed on the camera's GUI, the feature will no longer be enabled on the NVR
DS-2CD6362F-IVS	HTTPS is not supported for this camera Reason: Camera limitation	N/A
DS-2DF5284-A	The iris function works as a nudge, not as continuous Reason: Camera limitation	N/A
DS-2CD6362F-IVS	Edge Based Motion is not supported on Source Image 4 on this model Reason: Camera Limitation	N/A

Known Issues

Model	Known Issues	Work around
All models	Profile cannot be selected on the Functions & Streams page on the VideoEdge. Reason: VideoEdge Issue	Navigate to the camera web-page, under Configuration > Video/Audio. Select the required Profile from the Profile dropdown, and select Save.
All models	Adding a camera using HTTPS protocol. Due to a camera limitation, there is an extended delay when adding the cameras to VideoEdge when using HTTPS protocol. This will result in the camera not adding to VideoEdge. Reason: VideoEdge Issue	Add the camera with HTTP. Once added, navigate to Setup > General, and change the security group of the camera to a group with HTTPS enabled.
All models	When VBR is selected as the Bit Rate Control, the Bit Rate value cannot be saved. Reason: Camera Issue	To use VBR, navigate to the camera web-page, configuration > Video/Audio. Select the required Bit Rate in the Max Bitrate drop-down list, and select Save.
All models	When adding the camera to a micro NVR sometimes the default settings are not applied properly, i.e. motion detection is not applied correctly and the recording mode is set to Recording Always Reason: NVR issue	The user will have to reconfigure the camera to their desired settings. If they wish to set up motion detection they should follow these steps: 1. Enable Alarm on the second stream, click save. 2. Set the codec of the second stream to MJPEG, click save. 3. Change the FPS and resolution to the required settings i.e. 7fps and 320x240 resolution, click save. 4. Select your preferred recording mode and select Motion Detection in the Video Analysis dropdown, click save.
DS-2CD6362F-IVS	The audio volume is always 100 on the NVR's web GUI, this is regardless of the volume on the camera Reason: Camera issue	N/A
All encoders	For the multi-channel encoder, the NVR can only receive the Edge Based Motion event of the first channel. Reason: NVR's issue	If the user wants to use Edge Based on a particular camera, this camera will have to be in channel one.
All encoders	PTZ pattern setting are invalid for UD8 analogue camera Reason: Encoder's issue	N/A
All encoders	PTZ Speed is slow when encoder is used with Bosch and Pelco cameras. Reason: Encoder's issue	This issue is only present in victor and the Local Client dome control. The user can use a keyboard or click and drag function through victor/Local Client to achieve faster PTZ speed for Pelco cameras. Bosch Camera PTZ can't be made faster.
All encoders	When 2 or more PTZ cameras are connected to the encoder, the PTZ action is carried out on both cameras. Reason: Encoder's issue	N/A
All encoders	PTZ works abnormally for Pelco cameras under Pelco-D protocol. For the pan and tilt, sometimes the PTZ fails to stop in	N/A

Model	Known Issues	Work around
	time. Reason: Encoder's issue	
Cameras that support 1 stream or Fisheye models	When a camera only supports one stream or does not support motion detection when adding it the VideoEdge please disable the 'Enable Smart Search' check box as these camera will not support this feature. If this is not disabled then it may cause the camera to take longer to add and require a refresh of the browser	As some fisheye models support 4 channels and 3 of them are single stream this can take the camera longer to add please disable the 'Enable Smart Search' check box before adding. After adding you can then enable motion detection on channel 1.

The ONVIF Camera Handler will allow the NVR to be compliant with the standardization initiative for IP-based video cameras defined by ONVIF Profile S Specifications [1] illustrate the level of compliance currently supported by the ONVIF handler.

By complying with these standards, the NVR should be able to communicate and interact with the majority of ONVIF compliant IP-based cameras.

It should be stressed however that each camera must be pre-configured before being added to the NVR – see Mandatory ONVIF Camera Pre-requisites.

The configuration will be on a camera to camera basis, with the minimal configuration consisting of an IP address & password ranging up to various different settings (e.g. video codecs, audio and dry contact settings) which normally require a camera unit reboot in order for the new settings to take effect.

The appendix outlines the specific configuration steps required for one particular camera i.e. the HikVision Speed dome camera.

Mandatory ONVIF Camera Pre-requisites

Step	Configuration	Description
1	Camera Web Page	<p>Assign Camera IP Address (and password)</p> <p>User must first assign an IP address to the camera (follow the manufacturer's instructions). Optional - For increased security, change the camera's default password.</p> <p>(Do not lose the new password – otherwise follow the manufacturer's instructions to reset the camera to factory defaults).</p>
2	Camera Web Page	<p>Date and Time/Time zone</p> <p>User must go to the camera web page and change the Date & Time/Time zone to match the VideoEdge recorder.</p> <p>(CRITICAL) Otherwise the camera's WS-Username token authentication protocol will reject all ONVIF requests from VideoEdge if the time is greater than 5 minutes drift. VideoEdge will be unable to add the camera.</p>
3	Camera Web Page	<p>Disable RTSP authentication</p> <p>User must go to the camera web page and disable the additional RTSP authentication (if supported). The normal camera authentication (WS-Username token) will still apply – VideoEdge does not support the extra RTSP authentication.</p> <p>(CRITICAL) Otherwise VideoEdge will be able to add the camera using the WS-Username authentication but will be unable to stream media off the camera.</p>
4	Camera Web Page	<p>Dual Streaming</p> <p>User must go to the camera web page and configure the main stream as H264 (or MPEG4).</p> <p>(CRITICAL) If dual streaming is supported by the camera then the secondary stream must be configured as MJPEG.</p>

Step	Configuration	Description
		<p>The camera must be rebooted to commit the new codec settings.</p> <p>[Digital Watchdog] See Camera Limitations for Digital Watchdog devices.</p>
5	Camera Web Page	<p>Audio</p> <p>User must go to the camera web page and enable the Audio stream (if supported).</p> <p>(CRITICAL) If audio is supported by the camera then the camera must be configured to enable audio.</p> <p>Please follow the manufacturer's instructions to enable Audio</p>
6	Camera Web Page	<p>Dry Contact Alerts</p> <p>User must go to the camera web page and configure 1 or more dry contacts (if supported). E.g., some alerts will be configured to trigger when normally open (NO) or normally closed (NC)</p> <p>(CRITICAL) The camera must be rebooted to commit the new dry contact settings.</p>
7	Camera Web Page	<p>Auto Iris/Focus</p> <p>If a camera supports the Iris and Focus features then these settings can be either set to auto or manually adjusted within Victor GUI.</p> <p>However, disabling the auto feature is only supported in the VideoEdge NVR web GUI. Therefore, if the user is manually adjusting these settings then the auto Iris and Focus settings in the NVR GUI image settings page must be disabled.</p>
8	VideoEdge Admin GUI	<p>Security User Account</p> <p>User must go to the VideoEdge Admin GUI and configure a Security User Account using the camera's username & password. The user account is required in order to add the camera to VideoEdge.</p> <p>[Digital Watchdog] (CRITICAL) See Camera Limitations for Digital Watchdog devices.</p>

ONVIF Profile S

The ONVIF Profile S standard [1, 2] consists of a number of mandatory and optional features regarding video and audio streaming, multicast, PTZ and event/metadata support.

The mandatory features are further subdivided into two areas:

- a Profile Mandatory Features – these are guaranteed to be supported between a device and client that are both conforming to the profile.
- b Profile Conditional Features – these shall be implemented if the device or client supports the feature.
- c All of i) and a large subset of ii) of the mandatory features are supported by the NVR ONVIF handler.

None of the optional features are supported by the NVR ONVIF handler.

Supported Key Functions

- Video Streaming – Single and Dual

- Video Codec - H264 primary stream (or MPEG4),
 - MJPEG as secondary stream (where supported)
- Audio Streaming
 - Audio Codec - AAC, G711 and G726 (where supported)
- PTZ – applies to cameras with mechanical pan, tilt and optical zoom
- Dry contact events
- WS-Username Authentication

Audio/Video Stream Feature

- Changing the stream settings such as codec, resolution, FPS or quality of a selected video stream may require up to 5 seconds of time delay to re-establish the video stream.
- Video quality settings for MJPEG can differ across different manufacturers e.g. HikVision: 1-5, Illustra625: 1-100

Default Username & Password

- Username: admin
- Password: ADMIN

Limitations

The ONVIF standard can be interpreted in many slightly different ways by the various manufacturers who provide ONVIF enabled IP cameras. The NVR ONVIF handler has been written to accommodate these differences but it's been necessary to devise a number of configuration guidelines to aid with supporting an ONVIF enabled camera.

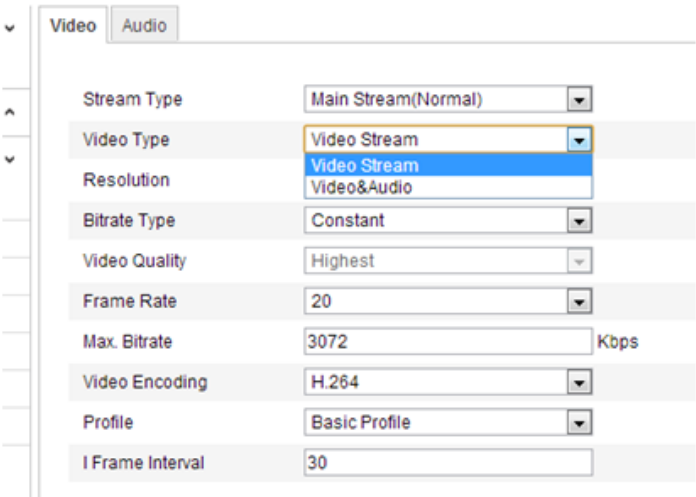
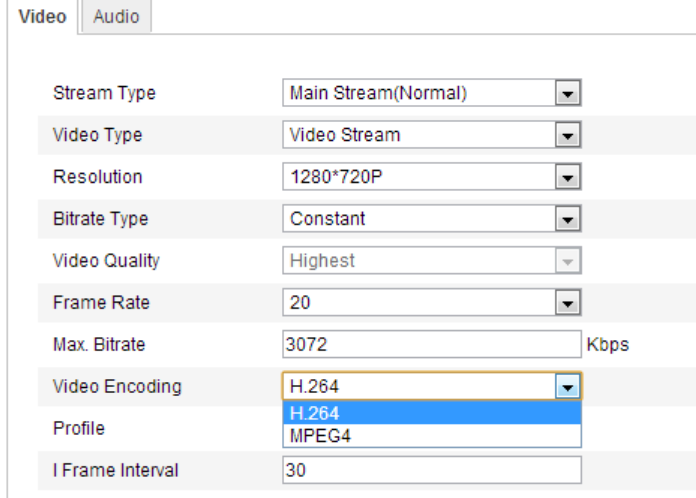
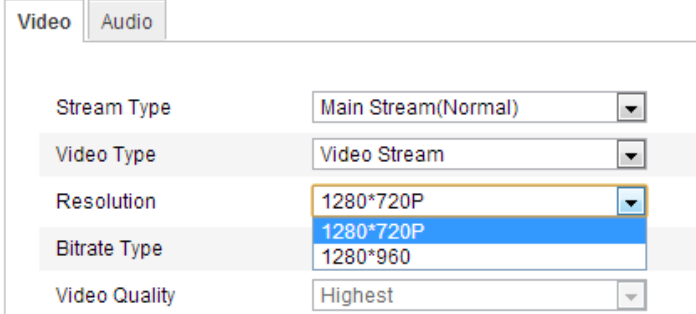
Manufacturer	Known Issue	Workaround
FLIR	<ol style="list-style-type: none"> 1 Camera may not add to VideoEdge 4.8.1. 2 Camera may not add to VideoEdge release 4.9.0 onwards. 3 PTZ Speed is slow and there may be a noticeable delay with presets being triggered 4 Video maybe unstable. 5 Resolution list on the VideoEdge may not be the same as the camera supports. 6 Bitrate setting are not supported on the VideoEdge. 	<ol style="list-style-type: none"> 1 Please contact technical support on how to add to VideoEdge 4.8.1 2 Please use the prefer onvif check box to add via onvif successfully. 3 There is no work around as this is a camera limitation 4 We recommend using the following settings <ul style="list-style-type: none"> • Stream 1: H264 at 30 FPS and a resolution of 1280x1024 • Stream 2: MJPEG at 7 FPS and a resolution of CIF (please set this up on the camera before adding) 5 Please check the camera web page when selecting a resolution on the VideoEdge to ensure it is supported. 6 Please change these setting on the camera webpage

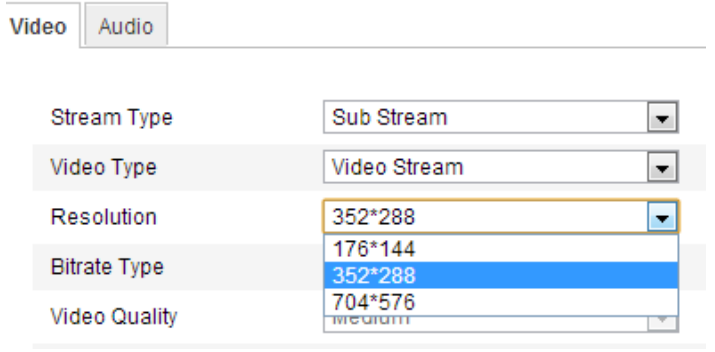
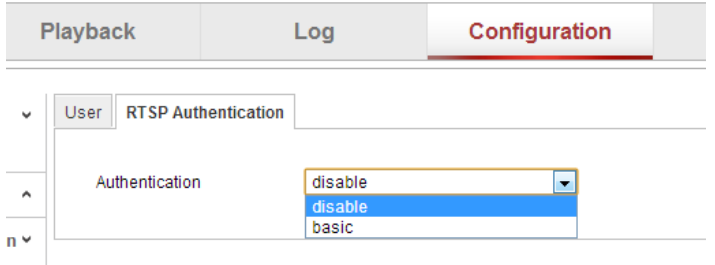
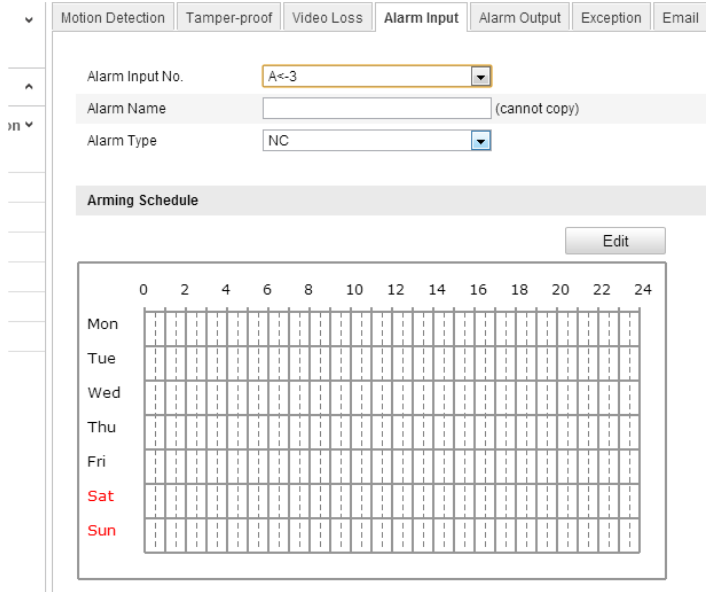
Manufacturer	Known Issue	Workaround
Digital Watchdog (Camera limitation)	1 Port Number	1 Use port 8032 instead of port 80 ONVIF entry point for device management uses port 80. User can change the port entry via Admin GUI Devices/Security
Redvision (Camera limitation)	1 Dual streaming 2 Set up ONVIF profiles for dual stream and stream configuration.	1 Dual Streaming – Redvision cameras will respond incorrectly to a query determining the number of simultaneous streams the device supports. However there is a workaround available in VideoEdge to set the number of simultaneous streams to ‘two’. Please contact your installer for further details. To allow for dual stream please upgrade to the latest firmware. 2 On the camera webpage, go to Video stream profile. Scroll to ONVIF Profile Sync, then click Sync.
Canon (Camera limitation)	1 WS-Security: Check Time on Authentication. 2 PTZ Presets. 3 Image Pixilation during PTZ	1 If supported by the Canon camera then disable the WS-Security: Check Time on Authentication – otherwise VideoEdge will not be able to add the camera. 2 PTZ Presets do not work with version NVR 4.6. 3 Go to the camera menu and change ‘Target Bitrate’ to greater than 12000, reboot camera after change.
Vision 360 Predator HD (Camera limitation)	1 PTZ Presets 2 Video Loss	1 Choose “Presets as ‘Number Only’” within the Predator camera web GUI 2 Change the RTP Block Size to 1448 Select Video > Stream 1 > Advanced > Change the RTP Block Size to 1448 > Click OK
Avigilon	RTSP Authentication: unable to stream camera via VideoEdge	In VideoEdge, RTSP Authentication is disabled by default. Normally, ONVIF cameras allow the user to enable or disable their RTSP authentication setting. However, RTSP authentication is mandatory for Avigilon devices’s video & audio streams. Therefore, to add Avigilon devices to VideoEdge the user must configure the VideoEdge to handle RTSP Authentication. Change the RTSP as follows login as a support user > Support > Control RTSP Auth > Enable > Save. Then add the camera to the VideoEdge recorder
Sony 6th Generation	1 Dry contact alerts are not displayed on the VideoEdge Recorder. 2 726 Audio does not work. 3 Camera will not add to the NVR. 4 No volume option on the VideoEdge.	1 Sony ONVIF profiles only support the push mechanisms where the VideoEdge supports the Pull mechanisms. The Sony ONVIF profile is not fully ONVIF compliant 2 Please use G711 or AAC

Manufacturer	Known Issue	Workaround
	<p>5 The bit rate does not work on the VideoEdge.</p> <p>6 The error “No Video Codec to select” is displayed on adding the camera.</p> <p>7 Focus and Iris displayed on victor Web and Local Client.</p>	<p>3 Please ensure the FPS and Resolution are at the lowest setting before adding. The camera is slow to respond to the request at the highest resolution and FPS. If the camera fails to add at the lower resolution please try to re-add again.</p> <p>4 Please change the volume on the camera web page.</p> <p>5 Please change the bit rate option on the Camera web page.</p> <p>6 Please contact support.</p> <p>7 This are not supported and do not work.</p>
<p>Generic Across a number of manufacturers e.g. HikVision, Panasonic, Samsung, Truen ... (Camera limitation)</p>	<p>Frame Rates</p>	<p>Some camera models have a limitation with regard to their advertised frame rates. E.g., the frame rates available through the camera web page may range from 1/16, 1/8, ¼, ½, 1, 2, 4, 6, 8, 10, 12, 15, 16, 18, 20, 22, 25 fps. The frame rate available through the ONVIF protocol comes in the range min – max e.g. 1 – 25 fps. If the user attempts to configure an invalid fps e.g. 7 the device will e.g. accept the next lowest value (6 fps) but the web GUI will display 7 fps.</p>
<p>Generic (Camera limitation)</p>	<p>Resolution</p>	<p>Some camera models have a limitation with regard to their advertised resolution. E.g., the resolution available through the camera web page could be 4 available resolutions. The resolution available through the ONVIF protocol provides up to 8 resolution options on VideoEdge. If the user attempts to configure an invalid resolution, the device will e.g. accept the next lowest value available on the camera but the web GUI will display the resolution selected in the NVR Administration Interface.</p>
<p>Generic (Camera limitation)</p>	<p>Camera Edge Motion Detection not supported</p>	<p>Camera Edge Motion Detection is not supported. We recommend it should NOT be enabled directly on the camera.</p> <p>Motion Detection can be enabled via the web NVR GUI for the camera</p>
<p>Generic (Camera limitation)</p>	<p>Dry Contacts and Presets- Zero or one based issue</p>	<p>Dry Contacts and Presets – zero or one based issue. Some ONVIF camera manufacturers have different offsets for Dry contacts presets etc. Some use zero-based indexing, while others are one-based. The NVR allows the user to fine tune the appropriate numbering offset on a per camera basis.</p>

Appendix

This section outlines the specific configuration steps required for one particular camera i.e. the HikVision Speed dome camera.

Camera Feature	Pre-configure Camera Settings
<p>Video Streaming By default the video stream is multiplexed with audio – this must be set to Video only</p>	 <p>The screenshot shows the 'Video' tab selected. The 'Video Type' dropdown menu is open, showing 'Video Stream' as the selected option, with 'Video Stream' and 'Video&Audio' listed below it. Other settings include Stream Type: Main Stream(Normal), Resolution: (blank), Bitrate Type: Constant, Video Quality: Highest, Frame Rate: 20, Max. Bitrate: 3072 Kbps, Video Encoding: H.264, Profile: Basic Profile, and I Frame Interval: 30.</p>
<p>Codecs Primary stream advertises support for H264 and MPEG4 but in practice only seems to support H264 Secondary stream codec must be MJPEG - change requires a unit reboot</p>	 <p>The screenshot shows the 'Video' tab selected. The 'Video Encoding' dropdown menu is open, showing 'H.264' as the selected option, with 'H.264' and 'MPEG4' listed below it. Other settings include Stream Type: Main Stream(Normal), Video Type: Video Stream, Resolution: 1280*720P, Bitrate Type: Constant, Video Quality: Highest, Frame Rate: 20, Max. Bitrate: 3072 Kbps, Profile: (blank), and I Frame Interval: 30.</p>
<p>Resolutions For H264 codec: Primary stream supports 2 largest resolutions Secondary stream supports 3 smallest resolutions An ONVIF request for resolution list for H264 will return all the resolutions. The user should be aware that the primary stream can only support the 2 large largest resolutions and similarly for the secondary stream</p>	 <p>The screenshot shows the 'Video' tab selected. The 'Resolution' dropdown menu is open, showing '1280*720P' as the selected option, with '1280*720P' and '1280*960' listed below it. Other settings include Stream Type: Main Stream(Normal), Video Type: Video Stream, Bitrate Type: (blank), and Video Quality: Highest.</p>

Camera Feature	Pre-configure Camera Settings
	 <p>The screenshot shows the 'Video' configuration tab. It includes dropdown menus for 'Stream Type' (Sub Stream), 'Video Type' (Video Stream), 'Resolution' (352*288), 'Bitrate Type' (352*288), and 'Video Quality' (Medium).</p>
<p>RTSP Authentication Must disable RTSP authentication NOTE doesn't affect the WS-Username authentication</p>	 <p>The screenshot shows the 'Configuration' tab for 'RTSP Authentication'. The 'Authentication' dropdown menu is set to 'disable', with 'basic' also visible in the list.</p>
<p>RTSP Authentication</p> <p>Must disable RTSP authentication</p> <p>NOTE doesn't affect tDry Contacts</p> <p>Must configure the dry contact: State = NC (Normally Closed) or NO (Normally Opened) Configure the times when the sensor is active Reboot the unit to take effect</p>	<p>BEFORE</p>  <p>The screenshot shows the 'Alarm Input' configuration page. 'Alarm Input No.' is set to 'A<-3', 'Alarm Name' is empty, and 'Alarm Type' is 'NC'. Below is an 'Arming Schedule' calendar grid with an 'Edit' button.</p> <p>AFTER</p>

Camera Feature

Pre-configure Camera Settings

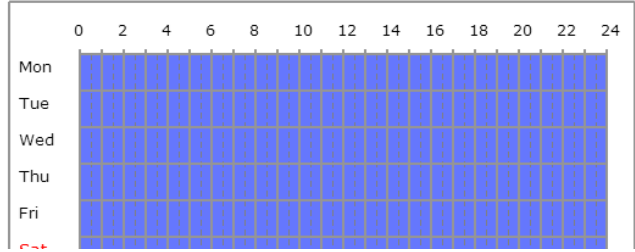
Motion Detection | Tamper-proof | Video Loss | **Alarm Input** | Alarm Output | Exception | Ema

Alarm Input No.

Alarm Name (cannot copy)

Alarm Type

Arming Schedule



Supported Key Functions

- Video Streaming – Single and Dual (R)
- Audio Streaming – Audio codec supported depending on the camera.
- PTZ – Applies to cameras that have mechanical Pan and Tilt and Optical Zoom.
- Events (Dry Contacts, Edge Motion, and edge Face detection)
- Metadata (Edge Motion and Edge Face)
- Query Device
- Reboot Device

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: 12345

Supported Camera API & Models

Model	Minimum Camera Firmware Version
SF438	2.47
SFN480	2.54
S2131	1.46
SW598A	2.54
GXE500 (Encoder)	1.36
SW559/SF549/SF539/SP509 SW558/SF548/SF538/SP508	1.30
SC386/SC396/SC384/SC385/SW395 SW316/SW316L SP334/SP304/SW314/SW155/SW152 SF332/SF335/SF336/SF342/SF346 SP302/SP305/SP306/SW352/SW355	1.66

Model	Minimum Camera Firmware Version
SP102/SP105/SF135/SF132 ST162/SW172/ST165/SW174W/SW175 NW484/NW502S/NP502	
NW960/NW964/NS950/NS954	1.64E (Discontinued Models)
NP304/NF302/NP244/NF284	1.64 (Discontinued Models)
NS202/NS202A	2.74P0 (Discontinued Models)
Generic Fixed - for all unlisted Panasonic IP Fixed Cameras	N/A

Note:

The Panasonic camera handler supports Generic camera for those unlisted models. If one camera is not in the supported list but compatible with the Panasonic CGI interface "External interface specifications of Panasonic WV-Series Network Camera Ver. 1.35", it can be supported as a Generic camera.

Camera Serial Number

VideoEdge will use the camera's MAC address as the camera serial number.

Audio/Video Stream Feature

The specific Video stream feature characteristics by model families are:

Model	Video Stream Feature
GXE500 SF332, SF335, SF336, SF342, SF346, SP302, SP305, SP306, SW352, SW355, NW502S, NP502, SW316, SW316L, SP334, SP304, SW314, SC386, SC396, SC384, SC385, SW395	Dual stream When camera is in H.264 mode, H.264 + H.264 H.264 + MJPEG When camera is in MPEG4 mode, MPEG4 + MPEG4 MPEG4 + MJPEG
SW559, SF549, SF539, SP509, SW558, SF548, SF538, SP508, SW155, SW152, SF135, SF132, ST162, SW172, ST165, SW174W, SW175, SP102, SP105	Dual stream: H.264 + H.264 H.264 + MJPEG
NW484, NW960, NW964, NS950, NS954, NP304, NF302, NP244, NF284, NS202, NS202A	Single stream: MPEG4 or MJPEG
Generic	Single stream: H.264 or MPEG4 or MJPEG (Depends on camera capability)

Note:

- Changing the resolution/bitrate/quality/fps settings of the current codec will restart the codec and will affect all the video streams from this camera.
 - Video quality settings for MJPEG ranges from 0 - 9, while for MPEG4, camera has low, normal and fine. Normalized values in the VideoEdge for the same is 0 - 100, this makes the increment step for MJPEG being 10 and that of MPEG4 being 50.
 - Video quality and bit rate control settings for H.264 must be done via the camera web page.
-

The specific Audio Stream feature characteristics by model families are:

Model	Audio Stream Feature
GXE500 SW559, SF549, SF539, SP509, SC386, SC396, SW316, W316L, SP334, SP304, SW314, ST162, SW172, ST165, SW174W, SW175, NW502S, NP502, NW960, NW964, NS950, NS954, SF332, SF335, SF336, SF342, SF346, SP302, SP305, SP306, SW352, SW355, NP304, NF302, NP244, NF284, NS202, NS202A, SC384, SC385, SW395	G726
SW558, SF548, SF538, SP508, SW155, SW152, SF135, SF132, NW484, SP102, SP105	No Audio
Generic	Depends on camera capability

Note:

The creation/deletion/modification of audio streams does not affect previously created video streams

Event Stream Feature

HTTP Server push functionality available in Panasonic is used to efficiently obtain the dry contact event. The maximum number of dry contact events supported by each camera family:

Model	Max # of Dry Contact Supported
NW484, SF332, SF335, SF336, SF342, SF346, SP302, SP305, SP306, SW352, SW355, NP304, NF302, NS202, NS202A, NP244, NF284, SW316, SW316L, SP334, SP304, SW314, ST162, SW172, ST165, SW174W, SW175,	1
NW502S, NP502, NW960, NW964, NS950, NS954, SC384, SC385, SW395, GXE500, SW559, SF549, SF539, SP509, SW558, SF548, SF538, SP508, SC386, SC396	3
SP102, SP105, SW155, SW152, SF135, SF132	0
Generic	Dynamically acquire from camera

Limitations

Model	Limitations
All	<ol style="list-style-type: none"> <li data-bbox="500 327 1430 449">1 If no video is being recorded on H.264 for any Panasonic camera, please ensure multicasting on the camera webpage configuration page is turned OFF by navigating to Setup > Image/Audio > Transmission type > Unicast port, only then will VideoEdge start to record the H.264 stream correctly. <li data-bbox="500 470 1430 558">2 There can be no more than 5 connections to the camera including the web browser and VLC etc. Please ensure all camera web page connections are closed to get the best performance and streaming results. <li data-bbox="500 579 1430 667">3 Due to a camera limitation the FPS of the MJPEG is no greater than 5FPS. If you require the MJPEG stream to have a higher FPS than 5, please disable all H264 streams from the camera web page. <li data-bbox="500 688 1430 777">4 Only one pattern can be set on victor Client (for example camera WV-SW598A and may apply to all other PTZ cameras). This is a camera limitation as the camera(s) can only support one pattern. <li data-bbox="500 798 1430 886">5 For All fisheye models if the capture mode requires 2 channels, the FPS will reach a maximum of 15 FPS. This is a camera limitation and outlined in the camera manual. <li data-bbox="500 907 1430 995">6 When changing the audio volume on the SW598A,SF438 and SFN480the VideoEdge does not display the new saved value, but displays the old value however the volume has been changed. <li data-bbox="500 1016 1430 1071">7 Some cameras cannot reach higher than 15FPS for the MJPEG stream. Even if H264 is disabled on the camera GUI. This is a camera limitation. <li data-bbox="500 1092 1430 1180">8 The model prefix of every Panasonic camera is irrelevant when it is added to the VideoEdge. For example, a Japanese model "DG-SC385" is expected to have the same characteristics as the world wide model "WV-SC385". <li data-bbox="500 1201 1430 1230">9 Fractional frame rate settings are not supported by the VideoEdge. <li data-bbox="500 1251 1430 1465">10 VideoEdge admin webpage allows the Sharpness/Brightness/Saturation (under Image Settings, Video Properties) to be changed. If the value is changed and saved then the new displayed value may slightly differ from the value that was saved. That slight difference is expected behavior. The difference is due to the conversion of a 0 to 100 value to a different range value that is actually stored on the camera. For example, the actual sharpness (or aperture) range on the camera could be 0 to 31 or 0 to 63. <li data-bbox="500 1486 1430 1638">11 As cache mechanisms have been used to cache many properties of the camera (The setting under Image Settings). The cache is updated only when the last updating time exceeds 300 seconds or after some camera properties have been changed by VideoEdge. It's not recommended to modify the camera settings directly on the camera web page. <li data-bbox="500 1659 1430 1780">12 Cameras may not support 100 quality settings at the highest resolution. The VideoEdge will apply the quality change giving the impression change was successful but it will not take effect as camera will refuse it – refresh VideoEdge camera configuration to display the correct Quality option. <li data-bbox="500 1801 1430 1856">13 To achieve the best available frame rate for MJPEG, the camera web interface must be used to ensure that the H.264(1) and H.264(2) streams are set for

Model	Limitations
	<p>transmission off, and similar for cameras in MPEG-4 Video encoding format. For cameras which send audio over a low-bandwidth video stream, such as SW352, SW355, SC384, and SC385, this also requires the audio to be disabled. Even so, due to processing and bandwidth limitations, some camera models may not deliver the maximum listed frame rate when streaming MJPEG at the maximum resolution (especially at a high video-quality level).</p> <p>14 It is recommended that Edge face and motion are not used together please only use one or the other.</p> <p>15 When using edge face detection and metadata in a busy scene there may more alarms than expected.</p>
<p>NW502S, NP502, SP334, SP304, SW314, SC386, SC396, SC384, SC385, SW395, SW559, SF549, SF539, SP509, SW558, SF548, SF538, SP508, SW155, SW152, SF135, SF132, ST162, SW172, ST165, SW174W, SW175, SW316, SW316L</p>	<p>When Wide Dynamic Range is enabled (under Image Settings, Lens/Sensor properties), these camera models have a defined limitation that Back Light Compensation (under Image Settings, Video Properties) is not available. These camera models will display Back Light Compensation as read only setting "0".</p>
<p>GXE500, SF332, SF335, SF336, SF342, SF346, SP302, SP305, SP306, SW352, SW355, NW502S, NP502, SW316, SW316L, SP334, SP304, SW314, SC386, SC396, SC384, SC385, SW395, SW559, SF549, SF539, SP509, SW558, SF548, SF538, SP508, SW155, SW152, SF135, SF132, ST162, SW172, ST165, SW174W, SW175, SP102, SP105</p>	<ol style="list-style-type: none"> 1 The camera models which can support either H.264 with MJPEG or support MPEG-4 with MJPEG must be switched between those modes using the camera direct web interface. 2 Note that with certain models, an audio stream occurs as part of either an H.264 or MPEG-4 stream, The audio stream will fail if the video-stream format is switched off. It is best to settle on a video encoding format before the camera is added to the VideoEdge. 3 Due to the performance limitation of the multi-codec models which can support MJPEG with either H.264 or MPEG-4, while streaming MJPEG with H.264 or MPEG-4 simultaneously, the camera might not deliver the requested frame rate. Please refer to the Panasonic product catalog for details.
<p>SW355</p>	<p>A change in the audio bit-rate can take a long time for a response on the WV-SW355 (and perhaps other models) for unknown reasons. The bit-rate change request can be successful in which case the audio configuration page for the camera will display after 10-12 seconds displaying updated bit rate value. Bit rate changes may not be successful due to various timing constraints. In this case there would be an error message - "Failure to set Bitrate = XX for audio input". (Whereby XX = 16 or 32) Further error messages: "Device handler internal error" or "No VE Text response after waiting 5000 milliseconds" may display</p>
<p>SC386, SC396, SC384, SC385, SW395, NS202, NS202A, NW960, NW964, NS950, NS954</p>	<p>Some cameras have an Auto-Focus function that can be triggered, such as the SC386, using the Image Settings Lens/Sensor properties web-page. The Auto-Focus check box does not show the current auto-focus status and will always appear as unchecked; the check box can just be used as a button to trigger one time auto focus.</p>
<p>SW559, SF549, SF539, SP509, SC386, SC396,</p>	<p>For some cameras whose highest MJPEG resolution is 1280x960 or higher, when using MJPEG if a high quality setting is used while using the highest resolution, it results in streaming at a very high bit rate. This results in problems with Quick time</p>

Model	Limitations
SW316, W316L, SP334, SP304, ST165, SW174W, SW175, NW502S, NP502, SF335, SF336, SF346, SP305, SP306, SW352, SW355, SC384, SC385, SW395, SW558, SF548, SF538, SP508, SW155, SF135, SP105	playing out the stream, as there is limitation of playback of streams with high bit rate. However VLC seems to play it out normally. Solution is to use lower quality settings or enabling the Traffic Smoothing in VideoEdge Dynamic Bandwidth page.
WV-NS950, WV-NF284 and NW964	Due to the camera limitation, the bitrate for these models does not update on camera web GUI after changed on VideoEdge.
SF342, NW960, NW964, NS950, NS954	Due to the camera limitation, the quality of MPEG4 can't be changed. Changing of MPEG4 quality from VideoEdge web page will not take effect and the quality value will always be 50.
Generic	Generic camera handler provides video (single stream only), audio and events. No PTZ functions are supported.

Note:

Please refer to Panasonic cameras release notes published on the Panasonic website for more information about Panasonic cameras and limitations.

Known Issues

Model	Known issues
All	<ol style="list-style-type: none"> 1 For the models that support both of H.264 and MPEG-4 codecs, they can't support these codec simultaneously. The real currently supported codec needs to be explicitly set at the camera. 2 If audio bit rate is modified while streaming live in victor client, live audio may become corrupt; re-adding the camera to the live view pane will fix this issue. 3 On Victor client you may rarely experience that the screen will be black once you exit form instant play back this may happen if you change the resolution on the VideoEdge while in instant playback 4 If the camera supports PTZ then there will be no relative focus or iris supported 5 Dual streaming of MJPEG stream is unsupported for all camera models 6 If adding any of the fisheye models with the Quad and xxx + xxx image capture mode please unselect the "Enable Smart Search" checkbox. If this is selected it may take the camera longer to add and the VideoEdge webpage may become unresponsive for a period of time. It is suggested that unselect the "Enable Smart Search" checkbox for all fisheye models with all image capture mode 7 When using the 3M image capture mode for all cameras which support this option, for example on the WV-SF438 camera, MJPEG is not supported as the only resolution available is higher than what is supported on the VideoEdge. 8 Fraction frame rate are not supported by the VideoEdge so any fraction FPS values shown on the camera are not displayed on the FPS drop down list. 9 Bit rate values 64 and 128 are not displayed on the VideoEdge drop down list with

Model	Known issues
	<p>a lot of cameras</p> <p>10 G726 audio recording is not supported</p> <p>11 G726 audio is not recommended.</p> <p>12 Bit rate setting do not save if changed on the VideoEdge please use the Camera webpage.</p>
<p>NW484, NW960, NW964, NS950, NS954, NP304, NF302, NP244, NF284, NS202, NS202A</p>	<p>1 By default, the MPEG-4 capability is turned off programmatically. This will effectively disabled the audio capability, since the Panasonic handler utilizes MPEG-4 stream for audio streaming.</p> <p>2 MJPEG frame rate can be reduced if customer manually enables the MPEG-4 capability directly through the camera's web interface.</p>
<p>NW502S, NP502</p>	<p>1 Max frame rate for dual streaming is 15fps for VGA and 10 fps for QVGA.</p> <p>2 For single video stream, when the resolution is 1.3 mega pixels, the maximum frame rate for H.264 is 30fps. When the resolution is 3 mega pixels, the maximum frame rate for H.264 is 15fps</p>
<p>SF332, SF335, SF336, SW352, SW355, SP302, SP305, SP306, SF342, SF346, SP102, SP105, NP304, NF302, NP244, NF284, SW559, ST162, ST165</p>	<p>1 These cameras support two aspect ratios 4:3 & 16:9. MPEG-4 is not available when 16:9 is selected</p> <p>2 When either H.264 or MPEG-4 transmission is set to On, the maximum frame rate for MJPEG is 5fps</p>
<p>NP304, NF302, NP244, NF284</p>	<p>It is not recommended to use audio with these models, due to the camera limitation on the number of RTSP session. Using audio might result in losing live video. At very low frame-rate settings for MPEG-4, i.e. 1fps - 3 fps it has been observed that the actual frame-rate is much lower, between 0.5 fps - 1.5 fps. It is recommended to use higher frame-rate settings in these models.</p>
<p>SC384, SC385, SW395, SC386, SW396</p>	<p>In order to enable all four patterns, user needs to change the pattern setup by camera web GUI, otherwise only part of the patterns can be used.</p>
<p>NP244, NF284, NS202A, NW484, NS954, NW964, NF302, NP304</p>	<p>In MPEG-4 mode, while streaming at more than 2048 Kbps these camera models only support 1 effective stream in RTSP (Documented in "Function list of camera_encoder.pdf" from Panasonic or Section 8.1 in "CGI Common Ref Panasonic_Network_camera ver1.35.pdf"). Any access to camera web GUI while using the camera in VE NVR might result in an error message "Too many concurrent session" displayed on camera web GUI. This shall result in display of blue screen instead of the actual video. Selection of MJPEG in camera web GUI should restore the video. Because the audio stream is also attached with video stream, the audio may be always inaccessible in this case.</p>
<p>NW960, NW964, NS950, NS954</p>	<p>1 Due to a Camera limitation, Patterns cannot be cancelled during its set up phase. The "X" button is recommended not to be used in this case and the user should instead use the Stop button. If the user does click on the "X" button, the user should wait till the counter counts down to zero. The user can then add the pattern again using the start and stop buttons</p> <p>2 Due to camera limitation, the pattern learning process cannot be cancelled and stopped during adding a pattern via Victor client. User can do subsequent pattern operations until the learning process completed.</p>

Model	Known issues
NW964	<ol style="list-style-type: none"> 1 It has been rarely observed that the camera may reboot, when creating/editing a preset or pattern operation with Victor client. 2 Due to the camera limitation on its API, the active statuses of the second and third dry contact are not available. They are just showed as "NA" on the VE NVR web page.
ST162, ST165	<ol style="list-style-type: none"> 1 In Victor client, if user does a quick nudge of the pan/tilt button, the pan/tilt will keep on moving until it reaches its axis limited 2 During PTZ control on the ST165 the motor will cause a lot of noise via the internal mic, The audio output will be muted automatically by the camera at that time. User can either use the external mic and/or disable this muting feature via camera web page. Refer to the camera operation manual for the details.
SF132, ST152, SC385	It has been rarely observed that there may be 5 seconds of video loss on the MJPEG stream of these cameras due to the camera firmware issue.
SF132	Due to the camera limitation, the Back Light Compensation setting will automatically become 0 after changing the Wide Dynamic Range.
SW314	In rare cases SW314 PTZ details page on VE NVR web GUI may wrongly display the "Enable PTZ" button. After refreshing the page, the button will disappear.
GXE500	<ol style="list-style-type: none"> 1 This camera will only support one stream configuration for these codec across all streams. It means that changing the stream configuration of any one channel will affect all channels. If the dual stream of H.264 or MPEG4 is enabled, changing one stream configuration will affect another. 2 This encoder will only support a single audio stream which out handler will associate with the first channel. 3 Due to performance limitation, Panasonic limits the stream by number and bandwidth, to avoid stream loss it is recommended to lower the codec bitrate on the camera GUI 4 Though the encoder supports 256 presets, only 255 presets can be set by Victor client this is a victor client issue to do with the video overlay. 5 Due to the slow response from the camera, the active status of some of the dry contacts will appear as "NA" on the VE NVR web page. If the web page is refreshed then the normal status will show. 6 Encoder firmware v1.36 does not support Pelco-P protocol. Therefore it is recommended to upgrade to encoder firmware v1.40 which support Pelco-P protocol. 7 The default Pan/Tilt speed Panasonic provided in the Pelco-D protocol file for GXE500 is relatively slow. It is recommended to change the speed in the protocol file before uploading the file into Encoder. Please refer to the Panasonic GXE500 Installation Guide for details.
SF342 NW960 NW964 NS950 NS954	Due to the camera limitation, the quality of MPEG4 is always 'Normal' and can't be changed. So changing of MPEG4 quality from VE NVR web page will not take effect and the quality value will always be 50.

Special Points

- The handler will ignore the model prefix of every camera. So for example, "WV-SC385" and "DG-SC385" will be regarded as the same camera with same features. Currently four prefixes have been seen for Panasonic cameras, they are WV/DG/WJ/BB.
- It is recommended when the camera is added to the VE NVR, not to change any property parameters on the camera web GUI (unless specified on the release notes)
- When a camera is added, the default video codec will be H.264 if it is supported by the camera and selected as the Video encoding format on the camera-direct web-page. If not, then MJPEG will be used to establish the first video stream. If not, MPEG-4 will be used if it is available.
- For the cameras that support pattern, the supported pattern count is based on configuration of the camera which might be 1, 2 or 4.
- For those cameras that support image white-balance, the option supports 3 settings, namely
 - "1" - Automatic white balance control mode. (AWC)
 - "2" - Automatic tracing white balance mode.(ATW1)
 - "3" - Automatic tracing white balance mode under a sodium lamp.(ATW2)
- Some Video Properties like Brightness/Saturation/Sharpness are normalized to percentage (0-100), but the real value in camera is range from nCameraMin to nCameraMax which result in the values in VE NVR not covering all values in Camera.
- For edge motion and metadata function the user should first turn it on from the cameras webpage, then add the camera to VideoEdge.
- When enabling edge metadata please enable the "additional Information" check box on the VMD setup screen of the camera webpage.
- Customer should contact Panasonic to add an application for the face detection. Please refer to the camera's manual.

Supported Key Functions

- Video Streaming - Single and Dual
- Video Codec - H.264, MJPEG, MPEG4
- Audio Streaming
- Supported audio codec G711MU
- PTZ
- Dry Contact Events
- Query Device
- Edge device motion detection

Note:

- Whether above functions are all supported or not depends on the camera capabilities.
 - The camera capabilities will be dynamically acquired from Pelco cameras.
 - Pelco Handler will enable or disable some function based on the camera's capability feedback.
 - Motion Metadata is not supported
 - Relay output is not supported.
-

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Note:

Only basic HTTP authentication is supported. HTTPS is not supported.

Default Username & Password

- **Username:** admin
- **Password:** admin

Supported Camera API & Models

Model	Minimum Camera Firmware Version
IM10LW-1	1.9.2.2-20130717-1.8270-O1.9926
S5118	1.9.1.0-20130523-1.9310-A1.9721
NET5401T	1.8.2.18-20121109-1.8270-O1.8503
IXE32	0.6.3.0.5
IME329	0.6.3.0.5

Model	Minimum Camera Firmware Version
S6230	2.11.0.7.9340-A0.0
IMM12036	2.11.0.7.8360-A0.0
NET5504	2.1.9.2

Camera Serial Number

VideoEdge will use the camera's MAC address as the camera serial number.

Video Stream Feature

The specific Video stream feature characteristics by model families are:

Model Family	Video Stream Feature
All models	Dual stream: H.264, MJPEG or MPEG4

Note:

- MPEG4 is not supported by many Pelco devices.
- The actual codecs supported will be dependent on the camera

Audio Stream Feature

The specific Audio stream feature characteristics by model families are:

Model Family	Audio Stream Feature
All models	G711mulaw

Note:

- Pelco camera's audio stream is mixed with video stream, handler demux audio stream from "Video Stream 1".
- For some Pelco cameras, they support audio on their web GUI, but don't supply Audio in the API, so handler doesn't support audio.

Event Stream Feature

The handler uses UPNP GENA to get the dry contact status. GENA can be understood as one kind of HTTP pushing mode. The maximum number of dry contact events supported by each camera family:

Model Family	Max Number of Dry Contact Supported
All models	Dynamically acquire from camera

Special Points

- 1 When the camera is added to VideoEdge, it is recommended not to change settings via the camera web GUI, especially video and audio settings, because the changes may need to reboot the video codec and this will

- affect the VideoEdge.
- 2 Pelco handler will support Edge device Motion Detection Event and Alarm input directly from the camera.
 - 3 User need to enable Edge based motion detection on camera Web GUI before enabling on VideoEdge.
 - 4 User need to ensure that at least one alarm input is configured for use on camera web GUI.
 - 5 Camera Audio and Dry Contact will need enabled on the camera prior to enabling these on the VideoEdge, as the handler cannot directly enable these features.
 - 6 On the VideoEdge "Function & Streams" page, Stream 1 is associated to camera's "primary Stream" profile; Stream 2 is associated to camera's "secondary stream" profile.
 - 7 Pelco camera web GUI does not use the Pelco API to set its values. This means that some settings will be different between the camera GUI and VideoEdge, especially when dealing with MJPEG.

Limitations

The limitations listed apply to all models.

- 1 Video standard change is not supported. TV format returns PAL, even if the camera is configured for NTSC. This is a known issue of Pelco camera firmware.
Reason: Camera limitation.
- 2 Bitrate value displaying on VideoEdge may be different from camera web GUI.
Reason: Pelco API limitation.
Work around: None
- 3 Quality is not supported for H.264 or MJPEG for any cameras on VideoEdge.
Reason: VideoEdge limitation conflict with Pelco camera limitation. VideoEdge support quality for MJPEG codec while Pelco support quality of service for H264.
Work around: Use camera WEB GUI
- 4 White Balance, Back Light Compensation, WDR, and Day/Night mode cannot be modified via the API
Reason: Camera limitation.
Work around: Use camera WEB GUI
- 5 PTZ Pattern is not supported
Reason: Camera limitation
- 6 Audio PCMA not supported
Reason: Camera limitation.
- 7 Audio Codec can't set or change.
Reason: Camera limitation.
- 8 D5118] Sometimes focus function of camera stops working unless factory default.
Reason: Camera Limitation
Work around: Camera factory default
- 9 Sometimes, VideoEdge page pop up hint "Could not update the camera video properties"
Reason: Camera response is slow.
Work around: Refresh VideoEdge webpage.
- 10 Sharpness is not supported. This may be different with camera web GUI.
Reason: Pelco API limitation.
- 11 Sometimes cameras cannot be found in discovered device list after auto-discovery.
Reason: Slow camera response and VideoEdge can only wait for 5 seconds.
Work around: Check the network environment and retry again.

- 12 [IM10LW-1] To enable edge-based motion, it is recommended to set the FPS less than 30 and resolution less than 640X352. Once edge-based motion is enabled, if the user wish to go back to 720p the FPS needs to be set to 12FPS click "Apply" and change the resolution to 720p.
Reason: Camera limitation.
- 13 [IXE32, IME329] Setting bitrate on these models will produce a result negated by 1 E.g Setting CBR = 9010kbps will save as 9009kbps.
Reason: Camera limitation.
- 14 [IXE32, IME329] Camera configurations should be set-up properly on the camera GUI in order to retrieve Dry Contact alerts in VideoEdge. To enable this a user must set an alarm under Events > Sources and set-up a handler in Events > Handlers.
- 15 [IMM12036] This camera does not support MJPEG on VideoEdge due to a RTP header limitation, so it is recommended to add this camera without Smart Search
Reason: VideoEdge limitation
- 16 [IME329] MJPEG FPS value cannot be set through VideoEdge, this is a camera firmware problem
Reason: Camera limitation.
Work around: Change the MJPEG FPS value on the camera GUI

Known Issues

- 1 Edge motion detection will stop working when the camera's PTZ options are used
Reason: Camera Limitation
Workaround: PTZ to your desired image and then enable edge motion detection

Note:

For customers carrying out a VideoEdge Upgrade from version 4.4, please install the Samsung 4.7.0.17004 camera handler.

Supported Key Functions

- Video Streaming - Single and Dual
 - Video Codec - H.264, MJPEG and MPEG4
 - Video Codec – H.264, MJPEG for P&Q&X series
- Audio Streaming
 - Supports audio codec G.711 ulaw
- PTZ
- Dry Contact Events
- Query Device
- Edge Device Motion Detection and face detection

Required Network Ports

- Port 80 for HTTP
- Port 554 for RTSP

Default Username & Password

- Username: admin
- Password: 4321

Supported Camera API & Models

Model	Latest Official F/W
SNB-5000/A	snb5000_Series_3.10_130416
SND-5080/F	
SNV-5080	
SNV-5010	snv5010_3.10_130416
SNO-5080R	sno5080r_3.10_130416
SNV-5080R	

Model	Latest Official F/W
SNB-7000	snb7000_Series_2.10_130416
SND-7080/F	
SNV-7080	
SNO-7080R	snv_sno7080R_2.10_130416
SNV-7080R	
SNB-3002	snb3002_Series_2.20_130812
SND-3082/F	
SNV-3082	
SNB-5001	snb5001_series_1.20_130813
SND-5011	
SND-5061	
SND-5010	
SNB-7001	snb7001_series_1.21_131002
SND-7011	
SND-7061	
SNB-7002	snb7002_series_1.21_131002
SND-7082/F	
SNV-7082	
SNO-7082R	
SNB-6004	snb6004_Series_2.21_131008
SNB-6003	
SND-6084	
SND-6083	
SND-6084R	
SNV-6084R	
SNO-6084R	
SNV-6084	snv6012m_snv6084_1.11_131011
SNB-5004	snb5004_Series_1.12_131031
SNB-5003	
SND-5084	
SND-5083	
SNV-5084	

Model	Latest Official F/W
SNO-6011R	sno_snd_6011r_1.11_131011
SND-6011R	
SNV-6012M	snv6012m_snv6084_1.11_131011
SNF-7010	snf7010_Series_1.00_130806
SNF-7010V	No official release
SNP-3120V/VH	fw_SNP3120_1.29_130107
SNV-3120	fw_SNV3120_INT_1.24_110816
SNP-3371/H/TH	snp3371_snp3302_2.20_130930
SNP-3302/H	
SNP-5200/H	snp5200_snz5200_2.10_130523
SNZ-5200	snz5200_2.11_130816
SNP-6200/H	snp6200_1.20_130930
SNP-5300/H	snp5300_1.20_130930
SNP-6201/H	snp6201_1.01_131002
SNP-6200RH	snp6200rh_1.11_131002
SPE-100	SPE-100_400_101_v2.30_130820
SPE-400/B	
SPE-101	

Note:

- The Samsung camera handler supports Generic camera for those unlisted models. If one camera is not in the supported list but compatible with the Samsung CGI interface "STW_Network_Device_EN_v2.8.3_ALL_FINAL", it can be supported as a Generic camera.
- The Samsung camera handler Include 4 Series :S,P, Q & X series. S series is compatible with the Samsung CGI interface "STW_Network_Device_EN_v2.8.3_ALL_FINAL" P & Q & X is compatible with the Samsung CGI interface "SUNAPI2.0_EN_v2.5.1"

Camera Serial Number

VideoEdge will use the camera's MAC address as the camera serial number.

Video Stream Feature

The specific Video stream feature characteristics by model families are:

Model Family	Video Stream Feature
All models	Single stream and dual stream:H.264 + MJPEGH.264 + MPEG4MJPEG + MPEG4(Some

Model Family	Video Stream Feature
	devices aren't able to provide MPEG4)
P&Q&X series models	H.264 + MJPEG
Generic	Single stream and dual stream:H.264 + MJPEGH.264 + MPEG4MJPEG + MPEG4(Some devices aren't able to provide MPEG4)

Audio Stream Feature

The specific Audio stream feature characteristics by model families are:

Model Family	Audio Stream Feature
All models	G.711 ulaw if applicable
Generic	G.711 ulaw if applicable

Note:

The Samsung camera's audio stream is mixed with the video stream. The handler will extract the audio stream from video stream profile 2.

Event Stream Feature

The handler uses HTTP polling mode to get the dry contact status. The maximum number of dry contact events supported by each camera family:

Model Family	Event Stream Feature
All models	Dynamically acquire from camera
Generic	Dynamically acquire from camera

Special Points

- If added into a VideoEdge, we recommend not modifying the camera outside of the VideoEdge, or the VideoEdge may not work properly.
- As confirmed by Samsung, F/W upgrade/downgrade problems happen frequently with SNP-3120 series. Please use the Supported Firmware Version only, and take care when upgrading /downgrading camera of SNP-3120 series. Downgrading to 1.22_110120_1 firmware also resets the camera to default IP.
- For some Samsung cameras, the MJPEG FPS range is 1-5, the user should make sure the MJPEG FPS on VideoEdge web GUI is the same as that on the camera's web GUI.

Limitations

Model	Limitations	Work Around
All	1 We recommend using only one Edge analytic at a time. We do not recommend using both Edge face detection and Edge motion	1 N/A

Model	Limitations	Work Around
	<p>detection in the same instance. Otherwise you will not receive any motion detection alerts. This is a camera firmware issue.</p> <p>2 Due to the slow response from the camera APIs some cameras may not add using HTTPS. This is a camera limitation.</p> <p>3 Interface 'CameraName' is not supported as the camera has no CGI command for this interface.</p> <p>4 The SND 3080, SNP 3120, SNB 3002 are fixed PAL / NTSC. For other cameras there is a setting for changing PAL/NTSC on the Camera WebGUI but this only changes the analog output.</p> <p>5 Samsung cameras have no CGI command for getting autofocus status, and only a few cameras support setting it to on. The handler does not support autofocus property.</p> <p>6 Samsung cameras do not directly support video codec quality, but use compression rate on the MJPEG stream for this purpose. A high level of compression equals a low level of quality. The cameras' valid compression value range is 1-20. VideoEdge reverse converts it to 5-100%. Quality is not supported for H.264 or MJPEG4 for any cameras. SND-3080 does not support MJPEG stream compression. The camera's web page has a quality setting, but there is no specified API. So, the handler will not support MJPEG stream quality for this camera.</p> <p>7 Do not change the camera's video profile settings on the Camera Gui when the camera is added to the VideoEdge, otherwise changing FPS, resolution, bitrate or creating video stream may fail. Also after the camera is added into VideoEdge, the user MUST not change the set video standard setting, or change the 2M/3M setting.</p> <p>8 Some of the camera information (e.g. FPS ranges) provided by Samsung Support differs from the camera's actual capabilities as found on the WebGUI. The Handler uses API results for these details.</p> <p>9 Valid FPS for MJPEG is limited to "1-5" and set FPS>5 will failed if "E- mail/FTP profile" or "Record Profile" is enabled on the Camera WebGUI.</p> <p>10 MJPEG video quality may be reduced at higher FPS, even when setting quality to 100. This is a camera issue.</p> <p>11 Dual streaming will reduce the FPS. If both streams are set to 30 FPS, you will get approximately 15 FPS on each stream. Reducing the FPS on Stream 2 will increase the FPS on Stream 1. This has been confirmed as a camera limitation by Samsung.</p> <p>12 If you enable audio on H.264 or MPEG4, the FPS will drop roughly in half. This is because the camera opens another video stream and extracts the audio from it.</p> <p>13 The Samsung handler is now able to let the VideoEdge know what codec configurations are available for each camera. This</p>	<p>2 To add the camera via HTTPS please use the following steps. Add camera via HTTP to VideoEdge > Change camera to HTTPS on camera webpage > Move camera on VideoEdge to a security group with the correct security setting</p> <p>3 N/A</p> <p>4 N/A</p> <p>5 N/A</p> <p>6 N/A</p> <p>7 N/A</p> <p>8 N/A</p> <p>9 To get full FPS of 1-30, the user must make (on camera webpage) another MJPEG profile for "E-mail/FTP profile" and "Record Profile".</p> <p>10 N/A</p> <p>11 N/A</p> <p>12 N/A</p> <p>13 Disable stream 2, and change codec of stream 1, before enabling dual stream again.</p> <p>14 The user will have to manually change the settings back to their preferences</p> <p>15 N/A</p>

Model	Limitations	Work Around
	<p>now means that if the camera is set to dual stream, the user is unable to switch the codec's of stream 1 and stream 2.</p> <p>14 Upgrading from 4.4 to 4.7 may cause fps and resolution settings to revert back to the defaults.</p> <p>15 There may be some FPS fluctuation displayed in victor, where the FPS may drop to 14 and then return to 25.</p>	
XNB-6001, XNF-8010R & their respective families	<p>After a network cable pull or if the camera is disconnected/powered down, Edge motion alerts may not work after the camera comes back online. No Edge motion alerts will be sent from the recorder to victor client.</p> <p>Reason: Camera limitation</p>	Disable Edge Motion Detection on the VideoEdge and re-enable it.
XNF-8010R	There is a camera mount type option on VideoEdge, that causes video loss when modified.	User must select the appropriate camera mount setting on the camera GUI before adding the camera to VideoEdge.
PNP-9200RH	<p>Sometimes when PNP-9200RH is added to the VideoEdge, it adds with an FPS of 5 and a resolution of 320x240.</p> <p>PTZ zoom speed is slow on the camera</p>	<p>Once the camera has been successfully added to VideoEdge, the user can change the FPS and resolution to the desired values.</p> <p>N/A</p>
X-series	<ol style="list-style-type: none"> 1 Current firmware version (1.01_170520) when the FPS is set smaller than 6(H264 stream) , the camera reverts back to the previous set FPS. 2 Dry-contact function . If the power has no AC 24V , Then the state of the dry contact can not be changed on the VideoEdge . 	<ol style="list-style-type: none"> 1 Next X-series firmware will solve it . 2 User should make sure the AC 24 voltage is inserted .
All Encoders	For Samsung encoders, each channel has an independent IP. To add an encoder to the VideoEdge, the user should add every channel one by one. For the encoders can provide audio-in, only the first channel supports audio. For the encoders can provide AlarmIn, each channel supports 1 AlarmIn	N/A
SNP-3120 series SNB-5200 series SNB-5000 series SNB-7000 series	On the VideoEdge functions and streams page, when making changes to the stream configuration and analytics, an error message saying "Could not update resource stream parameters, error returned from database." This is a camera firmware issue due to this camera response being too slow. The changes are still made successfully.	N/A The changes are still applied and motion detection triggers.

Known Issues

Model	Known Issues	Work Around
All	<ol style="list-style-type: none"> 1 If the MJPEG resolution is set to the highest resolution when adding it the VideoEdge, it may result in an error appearing or the camera will only add with only one stream. To reduce this issue please set the camera to a low resolution using the camera webpage and when adding to VideoEdge un-check the "Enable smart search (Motion metadata)" option. If the camera does not successfully add please try adding the camera to VideoEdge again.. 	<ol style="list-style-type: none"> 1 N/A. 2 N/A. 3 N/A. 4 N/A. 5 N/A.

Model	Known Issues	Work Around
	<p>2 We recommend setting the MJPEG resolution to below 1MP, if the scene is very noisy or busy. Otherwise setting resolutions from 1MP or higher for MJPEG, this may result in bursts of video which may result in video loss..</p> <p>3 Due to the slow response from the camera APIs some cameras may not add using HTTPS. This is a camera limitation..</p> <p>4 When the resolution is lower than 800x600, the image's bottom edge may have a mosaic or color block.</p> <p>5 There seems to be duplicate Timestamps on VideoEdge, especially with a higher FPS. This issue causes the VideoEdge to sometimes restart the video stream. At higher FPS, the count of duplicate timestamps is increased. When the issue happens, VideoEdge 4.2.1, 4.3, 4.4, log will report a [isLargeTimeChange] issue. The vendor confirmed they have found this issue.</p> <p>6 Live view latency is about 500ms (H.264, MJPEG, MPEG4).</p> <p>7 Video and audio are sometimes out of sync on Instant Playback and Search & Retrieve in victor..</p> <p>8 Changing property may fail to update correctly if the following operations are done together, before clicking [Apply] button: enable secondary stream, change the codec type to MJPEG, change the property (FPS, resolution, etc). If this issue occurs, change the property again.</p> <p>9 , Most of Samsung camera's VPA properties' valid value are not set as a percentage. Therefore to meet VE-API's requirement, when display camera's value on VideoEdge, the handler needs to convert it as a percentage. The formula to convert camera value to VideoEdge's: The formula for convert from camera to VideoEdge value is:- The first value is always "1";- others, VideoEdge value = $1 + \text{step_index} * (99 / \text{step_count})$. 107329 - SNB models, set brightness to any number that ends in 0 , e.g 50, 60, 70, the VideoEdge will display 51, 61, 71 instead.</p> <p>10 Most APIs run slowly. This means when adding camera in VideoEdge may fail to add to the VideoEdge, or changing the camera settings (eg codec resolution etc) may show a server error message. When issue happens, the user needs try again.</p> <p>11 This particularly affects the SNB-1001 , where the following issues are found:- Error will pop up "No VE Text response after waiting 5000 milliseconds".- If successfully added to VideoEdge, camera won't resolve on the VideoEdge Device List "Loading Device Configuration" will stay on forever but user can stream live and recorded video from the camera on victor client.</p> <p>12 The workaround for this is to refresh the page once all the other cameras have been loaded. Once camera has resolved, navigating through different features of the camera will display "Server error" page. Clicking back or refreshing the browser is a workaround to this .</p>	<p>6 N/A.</p> <p>7 N/A.</p> <p>8 N/A.</p> <p>9 N/A.</p> <p>10 N/A.</p> <p>11 N/A.</p> <p>12 N/A.</p> <p>13 Wait for new fw, or increase FPS.</p> <p>14 Enable dual stream before enabling motion detection.</p> <p>15 Refreshing camera sometimes fixes the issue.</p> <p>16 N/A.</p> <p>17 Before adding camera to VideoEdge, disable the MJPEG profile's "email/FTP profile" by creating a new MJPEG profile and tick the email/FTP profile and record checkboxes on the camera web GUI. This will allow the user to select all Frame Rates available.</p> <p>18 N/A</p> <p>19 N/A</p> <p>20 We recommend that this resolution should not be used.</p>

Model	Known Issues	Work Around
	<p>13 If the FPS is set to low, the camera may fail. Vendor has confirmed it is GOV bug, will release a new fw to solve this issue. This means whenever that the user is unable to set the camera FPS to 1, 2 or 3.</p> <p>14 An error message appears when trying to enable Motion Detection on Single stream settings.</p> <p>15 VideoEdge 4.4: Sometimes the camera will not display MAC Address on General Tab. A refresh will fix the issue.</p> <p>16 The camera will not add after password is changed and correct password group is selected. This issue happens intermittently.</p> <p>17 Codec MJPEG offers FPS 1-30 but only saves as 5 max. - camera only supports 5 FPS when Email/FTP profile is enabled on the MJPEG stream on the Camera Web GUI.</p> <p>18 SNB-5000: When adding camera to VideoEdge with wrong password group incorrect error message displays: "AddVideo - no codecs to choose from!" rather than "Error adding device".</p> <p>19 Some cameras may not contain "-" or "." or spaces between the MAC address. This is only a cosmetic issue.</p> <p>20 As the VideoEdge doesn't support the 2048x1536 resolution, if this is supported on any camera and is set on the cameras web GUI it can cause issues on the VideoEdge</p>	
SNF-8010	<p>1 Displays more FPS option on the VideoEdge than is supported on the camera. These will fail to set and return to the previous value. Please reference the camera GUI or manual for supported FPS settings. This is a camera limitation..</p> <p>2 After a cable pull or lost of power to the SNF-8010 the audio stream may not return until it is disabled and re enabled on the VideoEdge audio list</p>	N/A
SNZ-5200, SND-5080, SNP-3430H, SNP-5200, SNV-5010, SNZ-5200 SNP-5300	Cameras' valid resolutions may not list in min-max (image width) order. It is because the VideoEdge uses resolution index to communicate with the camera, and their resolutions may not ordered from min to max.	N/A
SND-3080, SND-7080	Although the key cameras in some groups (SND-3080, SND-7080) support brightness, some cameras covered by them do not support it, so the VideoEdge web image page will display the brightness property value as BLANK.	N/A
SPE series and SNB-3000 series	For SPE series and SNB-3000 series (for example, SND-3080), AlarmIn reacts very slowly. It can be up to 4 seconds from manually triggering AlarmIn pins before the camera reports the alarm.	N/A
SND-3080	For SND-3080, camera may report false alarms for both AlarmIns when setting active state for any AlarmIn. When the active state is set to HIGH, the camera randomly reports false alarm status, which will	N/A

Model	Known Issues	Work Around
	cause wrong alarms in VideoEdge.	
SNV-5010SND-7080SND-3002SND-5080	If FPS is too low, RTSP connects to camera may timeout and then the VideoEdge will have no video. The following cameras were found to have this issue:For SNV-5010 and SND-7080, the MJPEG video will not display when the user sets fps to 1 and resolution to less than 1280*720.For SND-3002 and SND-5080, the MPEG4 video will not display when the user sets FPS to <=5.	N/A
SND-7080 SNB-5000 SND-5080 SND-5080F SNV-5080 SNV-5080R SNV-5010 SNO-5080R SNB-7000 SND-7080F SNV-7080 SNV-7080R SNP5200 SNO-7080R SNP-6002	<ol style="list-style-type: none"> 1 These models give a blurry / melting screen on victor at 320x180, 640x480, 800x600, 800x450 and 1920x1080 resolutions on H.264 stream. This is a confirmed issue with Samsung due to a multi-slice algorithm which is not supported by the VideoEdge. Enabling a second stream or an audio stream fixes this. 2 These models show an incorrect TimeStamp on victor when on single stream. This is also due to the multi-slice algorithm. 	<ol style="list-style-type: none"> 1 Try to enabling a second stream or an audio stream. 2 N/A
SNP-3120	PTZ Controls will not work using 1.26_120402 firmware. This is a camera firmware bug.	Upgrade Firmware
SNP-5200	Quickly adding PTZ presets causes the SNP 5200 to auto zoom in.	N/A
SPE-400	When connecting to UD8 analog camera, Samsung encoder SPE-400 combined PTZ not working with keyboard control.	N/A
SND-7011, SND-7082 and SNB-7002, with fw 1.06-400	Some cameras (SND-7011, SND-7082 and SNB-7002, with fw 1.06) sometimes cannot correctly provide H264 + MJPEG streams (streams keep restarting). When this issue happens, disable MJPEG's "FTP/Email, Record" functions may fix this issue.After upgrade the fw to 1.20, the cameras can provide two streams, but with video freezes and the FPS drops (Dual stream when H264 with highest resolution, FPS<=5; Single stream, FPS may be half of setting FPS.) or not stable (SND-7082, dual streams, FPS is vary between 4-30).	Disable MJPEGs FTP/Email and Record profile may fix the dual stream issue
SNP-3430H	The handler does not support SNP-3430H's sharpness function, due to this model is EOL and newer API does not have enough information to create sharpness property.	N/A
All models which support audio	All models which support audio will only support G711 codec, even if camera supports G726.	N/A
SNB 6004	VideoEdge 4.4: Samsung Handler: Local Client: SNB 6004 audio is out of sync on VE Local Client, but is in sync on victor unified client.	N/A
SNB-5000SNB-5000TJ	When MPV4 is set to 7FPS or below is selected; no video streams for any resolution.The issue is confirmed by vendor, it is caused by very slow RTSP response when FPS is set to less than 8. This limitation can cause issues when dual streaming with MPV4.	Increase FPS to 8 or above
SNB-5000	VideoEdge 4.4: Samsung SNB-5000: dual stream does not appear to be picking up the second stream settings, when live and alarm are set to stream 1, and stream 2 is set to record, when using victor playback, the record and live will be the same. This occurs occasionally. This can cause the FPS to be unstable and may fluctuate between both stream FPS settings.	Set the record stream as alarm stream.
SND-5080	On VideoEdge Image Settings page, a "could not retrieve the video or	Change the sharpness settings via

Model	Known Issues	Work Around
SNP-3371	lens properties” error message is occurring and the sharpness drop down menu is appearing blank.	the camera GUI: Camera GUI -> Setup -> Camera set up -> Special -> Sharpness level When added to the VideoEdge the settings will remain configured.
Encoders	Some cameras can support a max FPS of 25 or 30. In either case the resolution available in the resolution list shall always be the same. However, when a camera that supports only 25FPS is added to the encoder, the resolution streamed shall be the selected resolution on the camera GUI, but the resolution list will be different. When a camera of 25 max FPS is added to the Encoder the resolution list on the VideoEdge GUI will display the resolution for a camera that supports 30FPS but the cameras GUI will display the correct resolution list.	Set the required resolution on the camera GUI
SND-7001	<ol style="list-style-type: none"> 1 When dual streams are enabled for this camera, the camera is unable to stream at the settings set for the first stream - there are no palettes available for this stream. 2 It may take two attempts to successfully add this camera to the recorder. 	<ol style="list-style-type: none"> 1 Configure the camera for single stream only. Disable the 'auto-config' option for the camera on the VideoEdge recorder. To disable Auto Configure: Select Devices > Video List > Select the camera setup icon > Function & Streams > Select the 'Disabled' radio button. 2 N/A

Camera Generation

Generation	Model Family
3rd Generation Cameras	SNC-CS50N/P, DF50N/P SNC-DF80N/P, DF85N/P SNC-RZ50N/P, RX530N/P SNC-RX550N/P, RX570N/P
4th Generation Cameras	SNC-CM120 SNC-CS20 SNC-DM110, DM160 SNC-DS10, DS60
5th Generation Cameras	SNC-CH110, DH110, DH110T SNC-CH210, DH210, DH210T SNC-CH120, CH160, CH220 SNC-DH120, DH120T, DH160 SNC-DH220, DH220T, DH260 SNC-CH140, CH180, CH240 SNC-CH280, DH140, DH140T SNC-DH180 SNC-DH240, DH240T, DH240 SNC-CH260, DH260, DH280 SNC-RH124, RH164, RS46N/P SNC-RS44N/P, RS86N/P, RS84N/P SNT-EX101, EX101E, EX104 SNT-EX154, EP104, EP154 SNC-EP520 SNC-EP521 SNC-EP550 SNC-EP580 SNC-ER520 SNC-ER521 SNC-ER550 SNC-ER580 SNC-EB520 SNC-EM520 SNC-EM521
6th Generation Cameras	SNC-WR630,SNC-WR632C,SNC-WR600, SNC-WR602,C,SNC-VB630,SNC-VM600, SNC-VB635,SNC-VM630,SNC-VM631, SNC-VM632R,SNC-VB600,SNC-VM601, SNC-VM602R,SNC-VB600B,SNC-VM600B, SNC-VM601B,SNC-VB632D,SNC-EB630, SNC-EM600,SNC-EB632R,SNC-EB602R, SNC-EB630B,SNC-EM630,SNC-EM631, SNC-EM632RC,SNC-EB600,SNC-EB600B, SNC-EM601,SNC-EM602RC,SNC-XM632, SNC-XM631,SNC-XM636,SNC-XM637 SNC-CX600,SNC-CX600W,SNC-HM662
7th Generation Cameras	SNC-VB770, SNC-VM772R

Supported Key Functions

- Video Streaming – Single and Dual
 - Video Codec – MJPEG, MP4V and H.264
- Audio Streaming
 - Audio codec supported depends on camera functionality
- PTZ – applies to cameras with mechanical pan, tilt and optical zoom
- Edge Based Motion Detection
- Edge Based Motion Metadata
- Edge Based Face Detection
- Edge Based Face Metadata
- Dry contact events – HTTP server push functionality is available for increase in efficiency and speed of obtaining dry contact events
- Relay Output state and pulses for applicable models only

Unsupported Key Functions

- Find devices
- Power-off devices
- Get device log
- Reset to factory default
- Digital PTZ – on cameras that support internal digital PTZ
- Reboot device

Audio/Video Stream Feature

- Changing the stream settings such as codec, resolution, FPS or quality of a selected video stream may require up to 5 seconds of time delay to re-establish the video stream.
- Video quality settings for MJPEG can range from 1–10. VideoEdge normalized values are 10–100 with increment step of 10. Video quality setting is not applicable for MP4V or H.264.
- Video bit-rate control settings for MP4V and H.264 must be done via the camera web page.

Required Network Parts

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: admin
- Password: admin

Setting up 6th and 7th generation cameras for use on VideoEdge

- Only the first stream is enabled after factory default. To allow for dual streaming, the second stream must be enabled on the camera web page before adding to VideoEdge.
- If using Edge Motion and/or Face detection you must enable and set respective windows on the camera web page before adding to VideoEdge.
- Some cameras which support “Stabilizer” (Navigate to System->Installation-> Stabilizer), you must disable “Stabilizer” before configuring Motion detection on the camera web page. This is a camera limitation.
- It is important you close any camera browsers opened, especially for the camera Motion/Face detection configuration page after the Motion/Face configuration is finished. Otherwise Edge Based Motion/Face detection will not work. This is a camera limitation.
- It is important you close any camera browsers connections to the camera after adding it to the VideoEdge. If there are any open connections to the camera (via camera browsers) it may result in a negative performance impact on the camera, for example video loss or video freezes. This is a camera performance limitation.

Special Points

The following table shows the options for day/night mode on the VideoEdge, and the corresponding options on the Camera web page.

VideoEdge	Camera web page
Auto	Auto
Day	Manual (Status Day)
Night	Manual (Status Night)
Schedule	Timer

Limitations

The following limitations which apply to the previously released 5th generation cameras also apply to all new SONY camera models documented in this release:

- Cameras prior to the 6th Generation cannot tell the handler which resolutions are available on the camera. Therefore, the handler’s resolution list is fixed. When you configure the camera through VideoEdge, if you select an unsupported resolution for the second camera stream, stream swapping may occur. This may also cause streams to swap and settings to change during upgrade. For example, the SNC-CH110 camera through does not support the following resolution: 1280 x 720. If you select this resolution for the second stream, the settings may change after a handler reset.
- For the SNC-WR630 camera, after disabling edge motion alerts on the VideoEdge they may still be received in victor client. This is only in VideoEdge 4.8.1. If you want to remove the alerts, you will need to delete the camera and re-add to VideoEdge. This is fixed in VideoEdge 4.9.0 and later.
- G726 is not supported for all Sony camera, please use G711 or AAC.
- Bit rate control is not supported for MJPEG, only VBR is supported. Please set the Bit rate control to CBR before adding the camera to the VideoEdge and then use the camera web page to make changes to the CBR value

- For the SNC-HM662 camera, if dual streaming MJPEG is used you may experience instances of video loss using the following configuration but not limited too, ie 1600x1200 on Stream 1 and 640x480 on Stream 2. To reduce video loss frequency, we recommend you to reduce the resolutions for both Stream 1 and Stream 2.
- PTZ functions are not supported on all SONY Encoders due to the SONY API performance limitation.
- Relative Focus and Iris are not supported on all SONY Encoders.
- Relative iris is not supported, which means Victor client won't be able to adjust the Iris. However the absolute Iris adjustment is available through the Camera web page.
- Due to a limitation in VideoEdge motion detection stream selection algorithm, the MP4V stream cannot be utilized for motion detection. This limitation requires quality setting in the MP4V stream, which is not supported by the cameras.
- The VideoEdge supports dual-streams for SONY 5th generation cameras with some camera performance limitations. Please refer to SONY camera documentation for more information.

Recommendations:

- Refer to the Camera web page to determine possible available dual stream combinations before setting the stream configuration in the VideoEdge. Resolution, FPS and quality settings in stream 1 will affect the possible configuration settings for stream 2.
- If the resolution of the primary stream is much larger than 640x480, create a secondary stream, at 640x480 or less.
- On some cameras, configuring Stream 1 to a high resolution and frame rate settings with H.264, the camera may not allow dual stream. In such case, an attempt to enable the motion detection meta data will fail.
- The VideoEdge in some cases may detect an attempt from a user to set a non-supported dual stream combination and will report an error. It will then automatically configure the stream to its known limitation, according to what is shown on the camera web page
- The configuration limits available for a secondary stream might be different between two cameras of the same model, same firmware level, and same primary stream configuration depending on some other camera configuration choices, such as Wide-Dynamic-Range (which, in some implementations, may cut the maximum available frame-rate in half).
- Over-configuration of streams can have different results on different camera models. In some instances, the camera attempts to run the configuration with a result that camera responses to direct commands become slower and slower. To recover from this over-configured settings may require camera reboot using the direct camera web page or camera power-cycle.
- It is recommended to change stream parameters (Codec, FPS, Quality, and Resolution) one step at a time, as repeated and excessive stream changes can cause the camera to continuously alarm on the VideoEdge/victor Client. Power cycling or rebooting the camera will normally clear the fail condition.
- The VideoEdge admin client camera details screen will mark MJPEG video resolutions that are greater than 2040 pixels in width or height as "unsupported". An attempt to select and apply an "unsupported" resolution from the drop down list will fail.
- An unrecognized SONY camera configured as SONY Generic will be assumed to be 5th-generation, with resolution choices comparable to CH220, CH260, DH220, DH260 – 1920x1440 max, 320x240 minimum. If that camera is configured (from the camera GUI) to have a max resolution of 1920x1080, then an alternate list of resolutions is used with 320x192 min. The available FPS are consistent with other 5th-generation cameras. The optional VPA and Lens properties are configured as EMPTY and controls would not be offered. Dual streams with H.264, MP4V, and MJPEG would be available, but there would be no audio and no contact alarms. The PTZ functionality will work if the PTZ camera is compatible with 5th-generation PTZ cameras.

- An invalid password group will cause the MAC address field and some VPA and Lens properties to display “unknown”. Errors will occur when attempting to change the FPS, resolution, quality or VPA and Lens properties.
- When there is a MP4V recording, set the resolution and fps value first before enabling audio. If fps or resolution must be changed after the audio, be sure to disable, re-enable and re-configure the audio to avoid 1 second audio lag in play back.
- SONY 5th generation cameras set with motion-detection using MJPEG will present the limitation that if H.264 has been used for the primary stream, it cannot be used for the secondary stream.
- Digital PTZ is not supported.
- Due to the above limitation, it is recommended to set the aspect ratio of CH210, DH210/210T to 16:9 prior to configuring them on VideoEdge. The 4:3 aspect ratios can be set after they are configured on the VideoEdge. However, re-adjusting the FPS, resolution may be necessary for them to work properly with the VideoEdge.
- On some Sony cameras the primary and secondary streams configuration will not necessarily reflect stream one and stream two on the VideoEdge. The camera only identifies the streams by the stream codec (ignoring FPS and resolution). Therefore Stream one on the cameras web page may reflect the second stream on the VideoEdge.
- Sony cameras that are set to use HTTPS may not be found by the VideoEdge auto-discovery function. These cameras need to be added manually.

Known Camera Limitations

Model(s)	Known Camera Limitation/Behavior	Notes
All Cameras 6th and 7th generation	<ol style="list-style-type: none"> 1 On VideoEdge the bitrate is shown as a text box for H264. 2 It is important you close any camera browsers connections to the camera after adding it to the VideoEdge. If there are any open connections to the camera (via camera browsers) it may result in a negative performance impact on the camera, for example video loss or video freezes. This is a camera performance limitation. 3 After loss of power to the camera it may take up to 2 minutes for the edge alarms and meta data to come back online, this means there will be no alerts or meta data for these 2 minutes. 4 Adding and changing configuration on the camera may be considerably slower than previous generations. 	<ol style="list-style-type: none"> 1 Please check with the camera web page on settings that the camera supports, this is a camera firmware issue. 2 This is due to a camera performance limitation. 3 This is due to a camera performance limitation 4 This is due to poor camera performance
Cameras using HTTPS	You may encounter the following errors when adding or using camera via HTTPS. This is	<ol style="list-style-type: none"> 1 Refresh the VideoEdge web page and your camera will be added. However, the

Model(s)	Known Camera Limitation/Behavior	Notes
	<p>due to camera performance limitations:</p> <ol style="list-style-type: none"> 1 On add the following popup appears: “No VE Text response after waiting 5000 milliseconds.” 2 On add the following popup appears: “Error adding device.” 3 On add the following popup appears: “Unable to query Video Resource Stream - handler error: A requested resource is missing or unavailable.” 4 On add the following popup appears: “Unable to query number of audio inputs - handler error: unsupported.” 5 Video Properties may not be displayed as expected. 	<ol style="list-style-type: none"> Audio stream is not associated with the Video. You can change this on the advanced edit page. 2 Refresh the VideoEdge web page and confirm that your camera is not on the Video or Audio list. 3 Refresh the VideoEdge web page, go to the Audio list. Delete the audio device and re-add the camera. 4 Refresh the VideoEdge web page and delete the camera from the video list. Then, re-add the camera. 5 Refresh the VideoEdge admin page.
SNC-VM772R	<ol style="list-style-type: none"> 1 Before adding to the VideoEdge ensure that B-Picture is turned off on the camera web page to ensure video streams as expected 2 Edge metadata is not supported for this camera. 3 The camera add page may be displayed longer than expected or never disappear until a refresh of the page. 4 VideoEdge motion detection is not supported on this camera. Please use Edge Based motion detection. 5 Image setting are displayed on the VideoEdge not all of these are supported by the camera. 	<ol style="list-style-type: none"> 1 On the camera webpage go to Settings > Video/Audio > Video Codec > B-Picture 1 > uncheck the box and press OK 2 This is due to a camera firmware limitation. 3 This is due to a camera limitation where only 1 stream is available when in 4K mode, also the camera does not support MJPEG. Please uncheck “Enable Smart Search (Motion Metadata)” to reduce seeing this issue. 4 This due to the camera not supporting MJPEG codec. 5 Please change all image settings on the camera web page.
SNC-HM662	<ol style="list-style-type: none"> 1 Audio for this camera is not supported. 2 Video displayed on victor Client has a lower FPS than is set on VideoEdge, to achieve full FPS and Resolution please disable “Auto-configuration” and use “single streaming”. If dual Streaming is required please reduce the resolution on the first and second stream to the lowest 	

Model(s)	Known Camera Limitation/Behavior	Notes
	<p>resolution available.</p> <p>3 Please make all image property changes for this camera on the camera webpage. The image property settings are not supported on the VideoEdge admin GUI.</p> <p>4 Edge Motion metadata is not supported on this camera</p> <p>5 Dewarp is not supported on this camera on victor client. This is due to the camera not supporting the required API.</p>	
SNC-WR630	In some instances the camera cannot be added to VideoEdge. (More often after multiple camera configuration changes).	This is a camera performance limitation. Please use the following workaround: Factory default the camera and set the resolutions of all the streams to the lowest resolution.
All SONY Cameras	<p>1 Retrieving camera configuration on VideoEdge does not require authentication.</p> <p>2 Due to SONY camera over-configuration issues, cameras may not respond to the following resolution change request. If this happens, the camera will return its own setting. For example:</p> <p style="padding-left: 40px;"><i>From:</i> H.264@5fps 640x480 MJPEG@5fps 640x480</p> <p style="padding-left: 40px;"><i>To:</i> H.264@5fps 720x576 MJPEG@5fps 640x480</p> <p>3 The focus value is set from 0-45056, which is not user-friendly.</p> <p>4 If one camera with dry contact enable in VideoEdge is offline, it will slow response to click alerts tab and change the dry contact status in VideoEdge. It may take 30s to show the alert page, and take 60 to change dry contact active state.</p> <p>5 Unable to retrieve Stream 1 properties". / "Unable to retrieve camera configuration". The above errors may be displayed on VideoEdge camera stream configuration page after user edits the video stream setting(s). Due to camera limitation, camera fails to response to VideoEdge web page command within predefined VideoEdge timeout of 5 seconds. VideoEdge timeout occurs.</p>	<p>1 SONY camera CGI Get commands does not require authentication.</p> <p>2 In this case, user will see the newly requested resolution setting listed on VideoEdge. No error message is displayed on VideoEdge. User must refresh VideoEdge screen and check camera setting via camera web page to confirm if change request is executed successfully. Workaround: Repeat command on VideoEdge</p> <p>3 Workaround is to enable auto focus, or change settings on Camera Web page.</p> <p>4 Workaround: Remove offline defects</p> <p>5 To recover Stream properties, Refresh Camera configuration page</p>

Model(s)	Known Camera Limitation/Behavior	Notes
All models that support audio	<ol style="list-style-type: none"> When audio is streaming in victor and audio codec/bitrate is changed through VideoEdge the audio streaming through victor becomes a static noise The VideoEdge & victor client does not support playback G726 audio with bit rate of 24kps. 	<ol style="list-style-type: none"> Disabling and re-enabling audio using the audio icon in victor fixes the issue and it becomes a clear sound again.
All Megapixel Models	The QuickTime plug-in/player may not be able to live view video from the megapixel cameras at their highest resolution and 1fps.	
All encoders	The relative Pan & Tilt are the only two PTZ functions supported.They do not work in victor client	
All 3rd Generation Cameras	<ol style="list-style-type: none"> Required Set up Procedure for Dry Contacts: <ul style="list-style-type: none"> Dry Contact Settings on both camera Web page and VideoEdge must be set to normally closed. SONY 3rd generation cameras do not support dual streams Some Sony 3rd Gen cameras will only provide the maximum fps available on stream 1 when streaming the H264 codec. When streaming MPEG codec on stream 1 the max FPS is not obtainable. 	<ol style="list-style-type: none"> The required set up ensures correct signal being generated when sensor is triggered. MJPEG, MP4V, H.264 are supported
All 4th Generation Cameras	<ol style="list-style-type: none"> The camera can support only ONE video stream, either MJPEG or MP4V. The victor Client video reverse play back on Search and Retrieve as well as exported clips is not as smooth as expected. 	<ol style="list-style-type: none"> This is due to the camera performance limitation on the RTSP/RTP protocol.
All 5th Generation Cameras	Dual Stream Limitation	Over configuration issue described in this release notes document applies to Dual streaming. When resolution is setting is too high for camera to accommodate, camera will select its own settings and disregard user's setting from VideoEdge.
SNC-RZ50	PTZ functions are not supported	
SNT-EX101, SNT-EX104	Camera Focus does not work on Victor Client. This is because Victor Client uses "PTZSpeed" method to implement Focus. SONY Handler does not support PTZSpeed.	Login cam web page to focus
SNT-EX104	Video and audio frame loss may occur in SONY encoder.	This is due to camera performance issue.

Model(s)	Known Camera Limitation/Behavior	Notes
SNC-EP580	Video becomes unavailable after changing from H.264 to MP4V in some settings, e.g., Sometimes, video may become unavailable after changing H.264@1080p@30fps directly to MP4V@1080p@20fps on VideoEdge. No error message is displayed on VideoEdge admin client but camera codec setting remains un-changed.	In case the video becomes unavailable after changing Stream 1. The camera must be changed to MP4V using camera's web page before changing codec from H.264 to MP4V stream on VideoEdge.
SNC-EP580, SNC-ER520, SNC-RH124	Enabling blc will fail if auto IRIS is disabled.	<p>Required Steps for enabling blc for IRIS:</p> <ol style="list-style-type: none"> 1 Set Auto Iris mode to auto, 2 Set blc to on.
SNC-EB520	<ol style="list-style-type: none"> 1 MJPEG video can't be streamed simultaneously on both VideoEdge and camera web page 2 On camera web page, the resolution of Image 2 can't be higher than Image 1. 3 The SONY SNC-ER520 has a slower camera inquiry page response time than other SONY camera models. The camera inquiry CGI response time for this camera is about 0.85 seconds. 4 The focus value range doesn't match with the range of the handler encoder profile. The focus value range is 0-2399 in Sony handler encoder profile, but 0-2345 in VideoEdge web page. 	<ol style="list-style-type: none"> 1 This only applies to the following settings or the following settings: FPS30 704x576 FPS30 720x576. 2 If stream 1 resolution is 640x480 or higher, the highest fps of both streams is 15. In the case when VideoEdge only has one single stream enabled, you must check if there are 2 streams enabled on the camera via camera web page. You should use the camera web page to disable stream 2 before selecting the max resolution and fps settings for stream 1 on VideoEdge 3 The slower CGI response doesn't cause any VideoEdge time out issues. User may experience slow VideoEdge response when changing the configuration on VideoEdge. 4 There is no workaround
SNC-EP580, SNC-EP520, SNC-EP521, SNC-EP550	<ol style="list-style-type: none"> 1 MJPEG Single Stream Limitation. 2 MP4V FPS Limitation 3 MP4V Stream Limitation 	<ol style="list-style-type: none"> 1 When camera resolution is set to MJPEG@1920x1280@any fps greater than 6 on VideoEdge, camera will select its own settings and disregard user's setting from VideoEdge. 2 FPS for MP4V stream has maximum value of 20. 3 Video loss may occur when camera is set to mp4v@1080@20fps.
RH124/DH180	When focusing in victor, the image can be focused but the listed focus value on VideoEdge is always 0	

Model(s)	Known Camera Limitation/Behavior	Notes
SNC-DH180	The focus value range doesn't match with the range of the handler encoder profile. The focus value range is 0-2399 in Sony handler encoder profile, but 0-2345 in VideoEdge web page.	No workaround
SONY Generic	The SONY Camera Handler supports generic cameras for those unlisted models. If one camera is not in the supported list, but is compatible with the SONY interface, it can be supported as a generic camera.	

URLs for Acquiring Video and Audio via RTSP

Camera Generation	Video URL	Audio URL
3rd Generation Cameras	rtsp://<user>:<password>@<cam ip address>:554/media	rtsp://<cam ip address>/media/audio
4th Generation Cameras	rtsp://<user>:<password>@<cam ip address>:554/media	rtsp://<cam ip address>/media
5th Generation Cameras	rtsp://<user>:<password>@<cam ip address>:554/media/video<stream ID>	rtsp://<cam ip address>/media/audio
6th Generation Cameras	rtsp://<user>:<password>@<cam ip address>:554/video<stream ID>	rtsp://<cam ip address>/audio

Supported Key Functions

- Video Streaming - Single and Dual
 - Video Codec - MJPEG, MPEG4 and H.264
- Audio Streaming
 - Audio Codec - G711 PCMU
- PTZ
 - Applies only to cameras that have mechanical Pan, Tilt and Optical Zoom
- Dry Contact Events
- Query Device

Supported Camera API & Models

Supported devices are suggested by the vendor and they are divided into two categories: key models and non-key models. Non-key models utilize the same firmware as key models, and are covered by key models. The Handler is developed based on key models. Non-key models were not tested.

Model	Min. Camera Firmware Version
FD8136	0101a
FD8135H FD8335H	0201a
FE8171V FE8171	0100h
FE8172 FE8172V	0101c
SF8172 SF8172V	N/A
AF5127 AF5127V	N/A
IP8362	0101b
SD8313E	0202b
SD8362E	0201c
PZ8111 PZ8121 PZ8111W PZ8121W	0104a 0104a1 (experimental Firmware)
VS8801	0201c
Generic	N/A
FD8369A-V	0100f

Model	Min. Camera Firmware Version
FE9181-H	0100i
FD8355EHV	0202a
FD8173-H	0101a
FD8168	0100e
FD8367-TV	0103a
FD8371EV	0302a
SD9161-H	0100i

Note:

The Vivotek camera handler supports Generic camera for those unlisted models. Models not listed above can be added as generic models. Handler will provide features according to its capabilities. However, as information that can be dynamically acquired from the models is limited, generic models may not perform as well as models listed above.

Key and Non-Key Models

Key Model	Covered Non-Key Model(s)
FD8136	
FD8135H	FD8335H
FE8171V	FE8171
FE8172	FE8172V, SF8172, SF8172V, AF5127, AF5127V
IP8362	
SD8313E	SD8323E, SD8312E, SD8322E, SD8311E, SD8321E
SD8362E	
VS8801	
PZ8111	PZ8121, PZ8111W, PZ8121W
Generic	All other Vivotek models

Required Network Ports

- Port 80 is for HTTP
- Port 554 is for RTSP

Default Username & Password

- Username: root
- Password: (none)

Camera Serial Number

- VideoEdge will use the camera's MAC address as the camera serial number

Video/Audio/Event Stream Feature

Models	Features			
	Video	Audio	Dry Contact	PTZ
Generic	Codec: H.264 or MPEG4 or MJPEG (depends on camera capability) Dual Stream: (depends on camera capability)	(Depends on camera capability)	(Depends on camera capability)	(Depends on camera capability)
FD8136	Single Stream: H.264, MPEG4, MJPEG Dual Stream: H.264+ H.264 H.264 + MPEG4 H.264 + MJPEG MPEG4 + MPEG4 MPEG4+MJPEG MJPEG+MJPEG	Codec: G711 (PCMU)	1 alarm inputs with active status, polling mode	Flip
FD8135H (see notes 1 & 2 below) FD8335H	Single Stream: H.264, MPEG4, MJPEG Dual stream: H.264 + H.264 H.264 + MPEG4 H.264 + MJPEG MPEG4 + MJPEG MJPEG + MJPEG Note: MPEG4 is not supported due to a camera limitation	Codec: G711 (PCMU)	3 alarm inputs with active status, polling mode	Flip
FE8171V (see note 1 below) FE8171	Single Stream: H.264, MPEG4, MJPEG Dual stream: H.264 + H.264 H.264 + MPEG4 H.264 + MJPEG MPEG4 + MJPEG MJPEG + MJPEG Note: MPEG4 is not supported on dual stream due to camera limitation	Codec: G711 (PCMU)	1 alarm inputs with active status, polling mode	Flip
FE8172 (see notes 1 and 3 below) FE8172V	Single Stream: H.264, MJPEG Dual stream:	Codec: G711 (PCMU)	1 alarm inputs with active status, polling mode	Flip

Models	Features			
	Video	Audio	Dry Contact	PTZ
SF8172 SF8172V AF5127 AF5127V	H.264 + H.264 H.264 + MJPEG MJPEG + MJPEG			
IP8362 (see note 1 below)	Single Stream: H.264, MPEG4, MJPEG Dual stream: H.264 + H.264 H.264 + MPEG4 H.264 + MJPEG MPEG4 + MPEG4 MPEG4 + MJPEG MJPEG + MJPEG	Codec: G711 (PCMU)	1 alarm inputs with active status, polling mode	Flip
SD8313E (see note 1 below) SD8323E SD8312E SD8322E SD8311E SD8321E	Single Stream: H.264, MPEG4, MJPEG Dual stream: H.264 + H.264 H.264 + MPEG4 H.264 + MJPEG MPEG4 + MPEG4 MPEG4 + MJPEG MJPEG + MJPEG	Codec: G711 (PCMU)	3 alarm inputs with active status, polling mode	Absolute, continuous, stepped, zoom, focus, flip, preset
SD8362E (see notes 1 and 4 below)	Single Stream: H.264, MPEG4, MJPEG Dual stream: H.264 + H.264 H.264 + MPEG4 H.264 + MJPEG MPEG4 + MPEG4 MPEG4 + MJPEG MJPEG + MJPEG	Codec: G711 (PCMU)	3 alarm inputs with active status, polling mode	Absolute, continuous, stepped, zoom, focus, flip, preset
VS8801 (see notes 1 below)	Single Stream: H.264, MPEG4, MJPEG Dual stream: N/A	Codec: G711 (PCMU)	8 alarm inputs with active status, polling mode	Stepped, zoom, focus, flip, preset
PZ8111 (see note 1 below) PZ8121 PZ8111W PZ8121W	Single Stream: H.264, MPEG4, MJPEG Dual stream: H.264 + H.264 H.264 + MPEG4 H.264 + MJPEG MPEG4 + MPEG4 MPEG4 + MJPEG MJPEG + MJPEG	Codec: G711 (PCMU)	1 alarm inputs with active status, polling mode	Continuous, stepped, zoom, focus, flip, preset
SD9161-H (see note 5) Group 18(PTZ)	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec:PCMU	4 alarm inputs with active status, Polling mode.	Continuous, stepped, zoom, focus, flip, preset

Models	Features			
	Video	Audio	Dry Contact	PTZ
SD8364E (see note 5) Group 09 (SPD)	Single Stream : H264, MPEG4, MJPEG Dual Stream: Any combination of above codecs	Codec:PCMU	4 alarm inputs with active status, Polling mode.	Continuous, stepped, zoom, focus, flip, preset
FD8369A-V (see note 5) Group 16	Single Stream : H264, MJPEGDual Stream: any combination of above codecs	NA	NA	NA
FE9182-H (see note 5) Group18 Group 09 (Fisheye)	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec: PCMU	1 alarm inputs with active status, Polling mode.	NA
FD8355EHV (see note 5) Group 11	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec: PCMU	1 alarm inputs with active status, Polling mode.	NA
FD8168 (see note 5) Group 02 Group 05	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec: PCMU	NA	NA
FD8367-TV(see note 5) Group 03 Group 07 Group 13 Group 14 Group 14-T	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec: PCMU	1 alarm inputs with active status, Polling mode.	NA
FD8371EV (see note 5) Group 10 Group 15	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec: PCMU	1 alarm inputs with active status, Polling mode.	NA
FD8173-H(see note 5) Group 09 Group 08 (Fisheye)	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec:PCMU	1 alarm inputs with active status, Polling mode.	NA
VC8201 (see note 5) Group 10 (Dual Sensor)	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec:PCMU	2 alarm inputs with active status, Polling mode.	NA
MS8391-EV(see note 6) Group 14	Single Stream : H264, MJPEG Dual Stream: Any combination of above codecs	Codec:PCMU	1 alarm inputs with active status, Polling mode.	NA

Note:

- These models are recommended by Vivotek as key models and other models can be covered by these models. Non-

key models are supposed to have the same features as their key models.

- Only 'Stream 2' of this model supports the MPEG4 codec.
 - The models have two FOV(Field of View) modes: Fisheye mode (MAX 15fps) and 1080P Full HD (MAX 30fps). Changing the FOV option erases the motion detection, privacy mask, and preset positions that you previously configured. In addition, the resolution list and the frame rate list are also changed. This setting should NOT be changed after the device is added to a VideoEdge, as it may cause an error.
 - The model has two FOV (Field of View) modes: "Full HD(MAX 1080P 30fps)" and "Exceptional frame rate (720P 60fps)". Changing the FOV option will change the resolution list and the frame rate list. This setting should NOT be changed after the device is added to a VideoEdge, as it may cause an error.
 - The models with the bold font are recommended by VIVOTEK as key models. The key model can cover the other models that are listed in their group. For example, FE9182-H can cover the models in Group 18 and Group 09 (Fisheye).
 - The model MS8391-EV is a special model in group 14, as it is a single key model.
-

Video

RTSP URL for getting the stream from camera:

- `rtsp://<ip>/live.sdp for stream 1`
- `rtsp://<ip>/live<num>.sdp for stream 2 or above (<num> = stream number)`

Audio

The handler supports the following audio codec:

- G711
- PCMU;

There is no dedicated URL for audio streaming. Audio and video are originally mixed in the stream out of camera. Handler extracts the audio stream from the mixed stream with the RTSP SETUP command.

Dry Contact

The handler supports dry contact:

- 1 Interface Count - The dry contact count varies for camera models - it is got dynamically from camera
- 2 HTTP Client Polling is used to monitor alarm status. The polling interval is 250ms

Relay Output

Information about handler supports relay:

- 1 Interface Count - The relay output count varies for camera models - it is received dynamically from the camera

Limitations

- 1 The VS8801 has the following limitations:
 - Vivotek encoders do not support PTZ on victor client.

- Video stream performance is affected by the number of cameras that you attach to the encoder. If you use all eight encoder channels simultaneously, the combined maximum FPS is approximately 20FPS. When the encoder reaches this limit, a message appears on the VS8801 web page, in the **Overview** section of the **Audio and Video** page.

Note:

Frame rates are not guaranteed when all red-marked streams are used

- Encoder limitation: If you change the audio codec for one channel, the audio codec also changes for all other encoder channels.
 - Interlace is not supported on the VideoEdge.
 - Camera Brightness, Contrast, Sharpness, and Saturation are always shown as zero in the VideoEdge, even after users apply non-zero values to them via VideoEdge Administration Interface. This is caused by a camera limitation. To avoid these errors, configure these values through the camera web client
- 2 The mechanical design of the PZ8111 means that Pan and Tilt operations are limited to a certain degree.
- 3 All PTZ camera models cannot use multiple PTZ operations using a keyboard. The handler carries out the operation that is of a greater percentage than the others for Pan, Tilt, Zoom, Focus and Iris controls.
- 4 For all PTZ models, Diagonal PTZ is NOT supported.
- 5 e-PTZ is not supported.
- 6 The SD8313E and SD8362E: If continuous pan and tilt set are used, the camera will move up to the top and then slowly move toward the direction of the pan command. This is the camera's expected behavior.
- 7 Panoramic PTZ is not supported. For more information please refer to the Vivotek user manual.
- 8 When the FE8172 is added to the VideoEdge, if MJPEG is selected the camera is defaulted to constant bit rate. To increase the image quality the users can change the Bit Rate to Fixed Quality on the camera web client before adding to the VideoEdge however this will mean the user cannot stream the camera at the top two resolutions 1536x1536 and 1920x1920.
- 9 Due to a QuickTime limitation when quality is set to fixed this will cause low frame rates in QuickTime and VideoEdge, this does not affect Victor.
- 10 Video streaming is unstable at high resolution when light conditions are low. Vivotek suggests setting bit rate control to CBR for more reliable streaming. However users need to be aware that it may produce lower than desired frame rate. In VideoEdge 4.3, 4.4 the bit rate control can only be adjusted through the camera's web interface.
- 11 Vivotek has confirmed Switching from Day mode to Night mode may cause frame drops and video loss, depending on the light condition, complexity of the scene and the resolution setting. Setting the bit rate control to CBR may reduce the video loss.
- 12 The Models that support Field of View are slightly different from all other models:
- The resolution list, default resolution, and fps list vary with FOV setting. Once added into the VideoEdge, FOV should not be changed. Otherwise issues may occur. To change FOV, the camera must be removed from the VideoEdge first and then changed before re-added to the VideoEdge.
 - Some models support bitrate for MJPEG, Because it's not common that MJPEG does not support bitrate, The NVR does not support this (same as other cameras).
- 13 For all Fisheye Models that Support MPEG4. The VideoEdge cannot play the MPEG4 streams because they have custom data embedded, which will cause The VideoEdge to restart the stream frequently. So for fisheye models, MPEG4 is not supported, but H264 and MJPEG are still supported.

- 14 Some models for example, camera model SD8362 will support FPS greater than 30. However VideoEdge will only support up to 30 FPS.
- 15 The Following camera models SD8313E, SD8323E, SD8312E, SD8322E, SD8311E, SD8321E all use the same firmware and are regarded by the handler as SD83X3.
- 16 The Following camera models PZ8111, PZ8121, PZ8111W, PZ8121W all use the same firmware and are regarded by the handler as PZ81X1.
- 17 The FD8235H and FD8335H do not support dual stream MPEG4. If the user wants to change the codec of one stream to MPEG4, They should make sure the codec of the other stream is not MPEG4
- 18 Back light compensation is not supported.
- 19 Due to camera hardware limitation the frame rates may not reach the highest frame rate.
- 20 VS8801 Audio not working on all channels (encoder issue) this is due to a camera issue in earlier firmware .Firmware version V0201c or above should be used. However, as the max connection count is limited to 16 by firmware, which just meets the need of VideoEdge, if streams are occupied by any client other than VideoEdge, audio / video may not be streamed to VideoEdge. Users should keep the device dedicated to VideoEdge. For example, if a VLC is streaming video from a VS8801, VideoEdge will only be able to stream 15 streams from this VS8801.
- 21 Vivotek IP8362- in some circumstances due to low frame rate, high bandwidth and complexity of the scene user may experience Significant video freeze in Client Instant Playback throughout long period of video during night/day mode transition. This should not be observed when using Search and Retrieve.
- 22 When adding a Vivotek camera to VideoEdge, the bitrate control will be set by default to CBR. This can be changed on the VideoEdge after adding the camera.
- 23 The Vivotek fisheye camera requires a watermark to dewarp. Transcoding is not supported for these cameras as this will remove the watermark.
- 24 VIVOTEK does not support GOP setting. VIVOTEK an alternative method; you can configure the TIME period (in seconds) between two I frames. If required, you can configure the TIME period through the camera's web page.
- 25 Max frame rate is limited to 30(NTSC, mega pixel) or 25(PAL) due to VideoEdge limitation.
- 26 Vivotek suggests distinguishing cameras with API version 0302a from those with prior API versions (NOT firmware version). New cameras follows "OneFw" API sets while the old ones follows "All Series" API sets. Vivotek handler uses http://<IP>/cgi-bin/admin/getparam.cgi?capability_api_httpversion to get the API version of a camera
- 27 The VC8201 limitations: As the Video and Audio properties depend on the lens connected to the encoder if these change then the camera has to be removed from the VideoEdge and re added.
- 28 Vivotek cameras can support the following WDR options. WDR, WDR Enhance, WDR Pro. All these are dynamically received from the camera (if supported by the camera) with is determined by camera firmware. Please refer to the camera manual on the support of the WDR features.
- 29 H265 is not supported on VideoEdge.
- 30 Some models support Rotate Image. When changing image rotate setting, VideoEdge and victor client may have a lag because VideoEdge stops and re-starts the rtsp session.
- 31 FD8173-H It is recommended that the white balance setting for this camera should not be changed on the Camera GUI after it has been added to the NVR. Any changes should be made through the NVR on the image settings page.
- 32 The mjpeg stream that are greater than 2040 pixels in width or height can't play in victor or VideoEdge because the RTP header limitation on mjpeg, so Vivotek handler will filter out the available resolutions which greater than 2048x1536

- 33 Some Vivotek models cannot reach the FPS set on the VideoEdge especially when dual streams are configured, it is camera's performance limitation.
- 34 For the model MS8391-EV, changing Mirror image setting will cause frame rate drop to 1fps for a few seconds and may cause video loss
- 35 For the MS8391 and all other panoramic models the camera cannot stream above 2560x480 resolution.
- 36 Fisheye cameras: When you use panoramic dewarping in victor client the FPS will drop to as low as 3-4 FPS
- 37 When the HTTPS is enabled, the camera can respond slowly. If you the camera to VideoEdge and it does not appear in the VideoEdge device list, try adding it again.
- 38 VC8201 is a multi-channel camera. It supports two channels, and each channel can be mounted with identical or different sensors. There are two kind of sensor modules available:
- CU8171 - fisheye. 3 Mega-pixel sensor with fisheye lens
 - CU8131 - fixed. 1 Mega-pixel WDR sensor

The service property provided by a channel is dependant on the sensor that is mounted in that channel, and there are multiple sensor combinations.

For example: When the CU8131(fixed) is mounted in channel 1 and the CU8171(fisheye) is mounted in channel 2, the channel 2 fisheye stream dewarp feature will not appear in victor client. If the two sensors are exchanged so that channel 1 is CU8171(fisheye) and channel 2 is CU8131(fixed), the fisheye stream dewarp feature will exist in victor client.

The fisheye stream dewarp feature will only be displayed when channel 1 is the mounted with the fisheye sensor CU8171. This is because the VC8201 is a special encoder device. Other encoders for each channel have the same service property as the first channel, but for VC8201, each channel service property depends on its sensor. If the first channel is a fisheye sensor, the Vivitek handler will regard both channels as fisheye. Therefore the fisheye stream dewarp feature will be displayed on channel 1. We recommend that channel 1 is mounted with fisheye sensor CU8171 and the sensor must be connected to VC8201 prior to power-on.

Known Issues

- 1 After a long period the PZ81x1 camera may not show its settings on the VideoEdge camera list web GUI. If the web browser is used to see its web client, it will show "503 Service Unavailable. There are too many connections in use right now. Please try again later." This has been fixed in Firmware version 0104a1 and later.
- 2 The FD8135H may display Video stutter may occur on MJPEG stream. This is a camera hardware limitation.
- 3 When enabling motion detection, the second stream is automatically configured to MP4V. The second stream must then be manually changed to MJPEG. Click edit > change the codec on the second stream to MJPEG> Click save.
- 4 In the VideoEdge Administration interface, when you change the codec for both streams, occasionally one of the codec changes does not save. If this happens, you must change the stream codec again.
- 5 For the FE8171/FE8172, PZ81x1 and other models that support line in and microphones: You should use the camera web GUI to select the correct audio input for your deployment. If you select an internal microphone, you must use the camera web GUI to adjust microphone volume. If you select an external microphone, you must use the VideoEdge Administration interface to adjust the microphone volume.
- 6 Some newer models such as the FD8367-TV and the CC8130 (which use the All Series API) support wdr but do not support wdr. The VideoEdge displays wdr and not wdrc

Special Points

- 1 It is recommended when the camera is added to the VideoEdge, that no property parameters are changed on the camera web GUI (unless specified on the release notes)
- 2 For the following camera models FE8171/FE8172, PZ81x1 or any other model supporting mic and line in - Internal or external microphone must be selected on the device or via camera web client respectively before camera is added to the VideoEdge. The volume controls on the VideoEdge control the external mic, the internal mic can be changed on the camera web client.
- 3 Wide Dynamic range values are:

FD8135H	0 = off, 1 = on
FE8171, FE8172, IP8362	0 = off, 1 = low, 2 = high
SD8313E, SD8362E	0 = off, 1 = manual, 2 = auto

- 4 Vivotek cameras / encoders support three different ways to set / get video quality, and keep the quality value of each way. However, at any time only one of them is taking effect. Every time a new way is used to set quality value, this way will take effect with other two stand by, i.e. the last used way will block values of other two ways from taking effect on video (though they still can be got from camera).The way handler uses is called “percentage mode” by Vivotek. Its valid values range from 1 to 100. And camera web GUI uses the other two ways.
- 5 Vivotek handler enumerates the same bitrate range as camera web GUI does. But custom value is not supported.
- 6 Vivotek handler support s H.264 profile setting, which is not available on camera web GUI.
- 7 The Vivotek handler caches the mount type for the fisheye models. Users should NOT change mount type via camera web GUI, or dewarping may not work properly.
- 8 Relay Output:

NVR = High (0)	Camera = Grounded
NVR = Low (1)	Camera = Open