ADPRO® XO™

Firmware version 5.3.12

IP Camera List

Honeywell

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CHAPTER

1 INTRODUCTION

Scope of this Document

This document contains the list of supported H.264/H.265 IP cameras and H.264/H.265 IP video encoders for:

- The **ADPRO® FastTrace™ 2E** (FastTrace 2E devices with product numbers starting with 58).
- The **ADPRO® iFT™ Series** (iFT and iFT-E devices with product numbers starting with 60, 61, and 63)
- The **ADPRO® iFT Gateway** (product numbers starting with 66).

Wherever **ADPRO device** is mentioned in this document, it refers to all devices mentioned above.

For the supported cameras and video encoders for the ADPRO® FastTrace™ 2 (i.e. the FastTrace 2 devices with product numbers starting with 55), see the *FastTrace 2 Series Supported IP Camera List* (29579).

The lists in this document contain *only* cameras that Honeywell has tested and approved according to its own protocols. However, this list is not binding and makes no claim to be complete. If you want to use IP cameras or video encoders that are not listed in this document, Honeywell does not guarantee that the cameras will function on the ADPRO devices. Honeywell does not guarantee correct operation because cameras may show unexpected behaviour with firmware versions not tested by Honeywell. Honeywell does not offer any support for untested cameras.

You can find the latest versions of this document and any referenced document on the Security Solutions Support site www.xtralissecurity.com (logon may be required). If a document number is indicated (between parentheses), you can enter it in the Keywords box on the site, and search for the document.

Camera Firmware Versions

IP cameras are expected to perform best at their latest firmware version. Please refer to the manufacturer's website for full details on the latest available firmware. In the exceptional case that new camera firmware would not be backwards compatible with its previous version(s) as originally tested with the ADPRO devices, Honeywell will make the best effort possible to correct the situation in a reasonable amount of time.

Performance

IP cameras tend to generate bitrates that can go up to 4–5 Mbps per camera, especially for Full HD or Megapixel cameras. Depending on brand and type, the IP cameras can handle 2 or 3 streams. Specifically, and even key differentiator to traditional DVRs/NVRs, the ADPRO devices use multiple streams per camera to be able to manage live viewing, recording, transmission, and analytics in one box.

Knowing that any network connected device has its limits concerning bandwidth, disk access, throughput, storage capacity, number of streams... please notice the following rules of thumb for the ADPRO devices:

- FastTrace 2E: up to 20 x 5.1 Megapixel IP cameras @10 fps + max. 20 analytic channels (Obtained by Honeywell in-house testing using 20 x Axis P1357 IP camera @10 fps with FastTrace 2E – 58051540 model).
- FastTrace 2E and iFT Series with software version XOa 3 and above: up to 32 x 5.1 Megapixel IP cameras + max. 32 analytic channels (also depending on hardware).
- iFT Gateway devices with software version XO 4.2 and above: up to 4 x 2 Megapixel IP cameras + max. 4 analytic channels.

Note:

H.264 decoding is extremely sensitive to bandwidth use fluctuations related to camera view scenario and image content activity. Even changing IP camera brand will result in bandwidth use differences and influence the ADPRO device's performance behaviour.

H.265 decoding is supported in software version XO 4.2 and above with the Hikvision and generic drivers only. From software version XO 4.3, H.265 decoding is also supported with the ONVIF and Honeywell drivers.

Camera Sabotage (Tampering) Event is supported in XO 5.2 and above. Currently, H3W2GR1, H4W2PER2, H4W2PER2V, and HDZ302LIW cameras support this. If you have a new camera supporting the Camera Sabotage (Tampering) Event, you can contact Honeywell Technical Support to add the camera model name into the ipcam.def file.

CHAPTER

2 IP VIDEO STREAMS

Type of video stream behaviour	Number of independent camera streams	Continuous recording setting	Event recording setting	Live stream
A	1	Settings for continuous recording, event recording and live stream are equal. No analytics stream available*		
B	2 (standard for untested cameras)	= Analytics stream**	Programmable	Setting of event recording or analytics stream**
C	2	Programmable	Programmable	Setting of continuous recording or event recording*
D	3	Programmable	Programmable	Setting of continuous recording, or event recording, or analytics stream**

* No analytics stream available. Therefore, no motion detection, sabotage detection, post-motion detection, Honeywell analytic applications (LoiterTrace, IntrusionTrace), local video output, or generating quad pictures available. Such cameras are not recommended for Video Central Platinum or EMS.

** Analytics stream; used for motion detection, sabotage detection, post-motion detection, Honeywell analytic applications (LoiterTrace, IntrusionTrace), local video output, and generating quad pictures:

- Default analytics stream: CIF/SIF or the next available higher resolution with a maximum of 640 x 480, with Qnormal quality, at 5 fps. The minimum horizontal resolution is 352 pixels.
- With ADPRO software version XO 4.0 and above: aspect ratio and quality of the analytics stream are selectable, with a maximum resolution of 640 x 480.

The actual resolution depends on the video streams that the camera provides and that the XO software can access. You can check the actual analytics stream for each camera in the XO client, in the Video Inputs screen.

CHAPTER

3 SUPPORTED IP CAMERAS

This document lists the IP cameras supported for FastTrace 2E, iFT Series, eFT Series, and iFT Gateway.

Abbreviations

The following are the common abbreviations used in this document:

Abbreviation	Description
fps	Frames per second
FW	Firmware
HD	High definition
MP	Megapixel
NA	Not available
NOK	Not OK, cannot be used on FastTrace 2E or iFT Series device
NT	Not tested
SD	Standard definition

IP Camera Configuration

Honeywell recommends the following for configuring the IP cameras:

- To set the camera's IP address, use the manufacturer's camera discovery tool, or use the camera discovery function in the XO client (available from version XO 4.2). Avoid using management or administration tools.
- Before connecting the camera to the ADPRO device, reset the camera to the default values, except for the IP address (unless you are using the Generic Driver). Note that some camera functions may require specific settings in the camera web interface. This is indicated in the notes and footnotes in this document. With software version XO 4.0 and above, it is possible to access the camera's web interface from within the XO client. For details, see the XO Client Software User Manual (21796).

- Corridor mode in the camera is supported with XOa 3.02.0033; with XO 4.0 it is also supported with analytics.
- 180° panoramic view in the camera is not supported.
- Use the default ports between the camera and the XO device. Do not use port forwarding, as this may present issues with inputs and outputs, speaking to site, enabling cameras, etc.

Integrated IP Cameras

The cameras listed in this chapter have been tested and approved for use with the FastTrace 2E Series, iFT Series, and iFT Gateway devices.

IP Camera Manufacturers

Click the manufacturer to go to the supported IP cameras from that manufacturer:

With manufacturer's driver:

- ACTI beginning on page 15
- Arecont beginning on page 17
- Avigilon beginning on page 19
- AXIS beginning on page 21
- Bosch beginning on page 27
- Brickcom beginning on page 29
- Hikvision beginning on page 31
- Honeywell beginning on page 35
- JVC beginning on page 45
- Panasonic beginning on page 47
- Pelco beginning on page 49
- Samsung beginning on page 51
- Sanyo beginning on page 55
- Sony beginning on page 57

With Generic Driver

- NA

With ONVIF driver:

- American Dynamics/Tyco on page 70
- Avigilon on page 70
- BCS on page 71

- Canon on page 73
- Concept Pro on page 74
- Dahua on page 76
- Eneo on page 78
- Flir on page 80
- Genie CCTV on page 81
- Geovision on page 82
- Grundig on page 83
- IC Realtime on page 83
- IndigoVision on page 84
- LG on page 85
- Milesight on page 86
- Moog on page 86
- Redvision on page 87
- Santec on page 88
- Scati on page 88
- Sony on page 89
- Vista on page 89
- Vivotek on page 90
- Xeno on page 91
- Uniview on page 92
- Hanwha techwin on page 93
- TOA on page 93

CHAPTER

4 ACTI

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
E53[1]	HD 5 MP	2	B	NA	NA	NA	2.10.8	NA
E54	HD 5 MP	2	B	NA	NA	NA	2.11.23	6.5.23
E64	HD 1 MP	2	B	NA	NA	NA	XOa 3.0.5	6.6.16
E83[2]	HD 5 MP	2	B	NA	NA	NA	2.10.8	NA
E85	HD 1 MP	2	B	NA	NA	NA	XOa 3.0.5	6.6.16
E86	HD 3 MP	2	B	NA	NA	NA	XOa 3.0.5	6.6.16
TCD-500	SD	2	B	Audio in	1 x I 1 x O	NA	2.10.8	4.9.18
TCM-1231	HD	2	B	Audio in	1 x I 1 x O	NA	2.10.8	4.9.18
TCM-3511	HD	2	B	Audio in	1 x I 1 x O	NA	2.10.8	4.9.18
TCM-4101	SD	2	B	Audio in	NA	NA	2.10.8	4.9.18
TCM-4301	HD	2	B	Audio in	NA	NA	2.10.8	4.9.18
TCM-5311	HD	2	B	Audio in	1 x I 1 x O	NA	2.10.8	4.9.18
TCM-5611	HD	2	B	Audio in	1 x I 1 x O	NA	2.10.8	4.9.18
TCM-6630	SD	2	B	Audio in	1 x I 1 x O	Yes	2.10.8	4.9.18
TCM-7411	HD	2	B	Audio in	1 x I 1 x O	NA	2.10.8	4.9.18

[1] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[2] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

Note:

- Maximum usable framerate: 15 fps.
- Do not use B2 frames.
- When available (for E-Series) use Baseline Profile instead of Highline Profile.
- Untested camera models: some features may not function; restricted to maximum 2 streams.

CHAPTER

5 ARECONT

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
3105	HD	2	C	NA	NA	NA	2.10.8	NA

Note:

- No analytics stream available (see Management of the IP Video Streams on page 8).
- Untested camera models may not work at all.
- The Arecont Panoramic driver is not available in the XO client version XO 4.2. It is available again from XO 4.3.

CHAPTER

6 AVIGILON

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
1.0-H3-B2	HD 1 MP	2	B	In: ext. mic	NA[1]	NA	XOa 3.2.12	2.6.0.90
2.0MP-H3-B2	HD 2 MP	2	B	NOK	1 x O	NA	2.10.8	2.4.10.4
2.0MP-HD-H264-D1	HD 2 MP	2	B	In: NOK Audio out	1 x O	NA	2.10.8	2.0.4.16
2.0W-H3-BO1-IR	HD 2 MP	2	B	Audio in Audio out	1 x O	NA	2.11.23	2.6.0.14
3.0W-H3-BO1-IR	3 MP	2	B	NA	NA	NA	XO 4.3.6	–

Note:

- Untested camera models: some features may not function; restricted to maximum 2 streams.
- Audio out is only available from version XO 4.0.
- With ADPRO firmware version XO 4.0, keep the following issue in mind:
- When you default certain Avigilon cameras (such as the 2.0MP-HD-H264-D1), they only have one H264 stream enabled at the highest resolution. They can then no longer be enabled on the ADPRO device.
- Solution: open the camera web interface; decrease the resolution of the primary stream, and then enable the second stream as an H264 type stream. You can then enable the camera on the ADPRO device.
- Avigilon cameras will change the aspect ratio of the analytic stream to match that as the event stream. Also, the video frames arrive in bursts, which negatively affects the analytic performance, especially when using higher analytic resolutions. For optimal performance: when enabling the camera, select a low raw resolution with a 4:3 aspect ratio. Choose an event stream with that same aspect ratio. Mixing aspect ratios will result in poor performance and you will not be able to take calibration pictures.

CHAPTER

7 AXIS

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
A8004-VE	HD 1 MP 720p	3	D	In: built-in mic Out: built-in speaker	3 x I 3 x O	NA	XOa 3.2.12	5.65.1
A8105-E[1]	HD 2 MP 1080p	2	B	In: built-in mic Out: built-in speaker	Yes	NA	XO 4.2.8	1.58.2.2
C2005[2] Network Ceiling Speaker	NA	NA	NA	In: built-in mic Out: speaker	NA	NA	XO 4.3.6	–
C3003-E[3] Network Horn Speaker	NA	NA	NA	In: built-in mic Out: speaker	NA	NA	XO 4.0.7	1.20.0
F41	HD 2 MP 1080p	3	D	Audio in	4 I or O	NA	XOa 3.0.5	5.55.3.2
M1011	SD	2	B	NA	NA	NA	2.10.8	NA
M1011-W	SD	2	B	NA	NA	NA	2.10.8	NA
M1031-W	SD	2	B	In: built-in mic or audio in Out: built-in speaker	1 x I 1 x O	NA	2.10.8	NA
M1054	HD 1 MP 720p	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	NA
M1114/-E	HD 1 MP 720p	3	D	NA	NA	NA	2.11.23	5.50.3
M1125/-E[4]	Full HD	3	D	NA	1 x I 1 x O	NA	XOa 3.2.17	3.75.3.3
M1143-L	SD	3	D	NA	NT	NA	2.10.8	5.40.10
M3004	HD 1 MP 720p	3	D	NA	NA	NA	2.10.8	5.40.5
M3005/-V	HD 2 MP 1080p	3	D	NA	NA	NA	2.10.8	5.40.5
M3006	HD 3 MP 1080p	3	D	NA	1 x I 1 x O	NA	2.10.8	5.40.15

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
M3007 Dewarp	HD 5 MP	2	B	NA	NA	NA	XOa 3.0.5	5.55.1.4
M3011	SD	2	B	NA	NA	NA	2.10.8	NA
M3014	HD 1 MP	2	B	NA	NA	NA	2.10.8	NA
M3025	HD 2 MP 1080p	3	D	NA	1 x I 1 x O	NA	2.10.8	5.40.5
M3027-PVE Dewarp	5 MP	2	B	NA	1 x I 1 x O	Yes	XOa 3.2.17	5.75.1.1
M3037-PVE Dewarp	5 MP	2	B	In: built-in mic Audio out	1 x I 1 x O	Yes	XOa 3.2.17	5.75.1.1
M3044-V/ WV[5]	720p	3	D	NA	NA	NA	XO 4.0.7	6.15.6
M3045-V[6]	Full HD	3	D	NA	NA	NA	XOa 3.2.17	6.15.1
M3047-P Fisheye[7]	2048 x 2048	3	D	NA	NA	NA	XO 4.3.6	7.15.2.3
M3058-PLVE Fisheye	12 MP	2	B	NA	NA	NA	XO 4.3.6	8.30.1.1
M3114-R	HD 1 MP 720p	2	B	NA	NA	NA	2.10.8	5.21
M3204	HD 1 MP 720p	3	D	NA	NA	NA	2.10.8	5.12.1
M5014	HD 1 MP 720p	3	D	NA	NA	Yes, only for setting	2.10.8	5.25.2
M7011[8] Video Encoder	720 x 576	3	D	NA	NA	NT	XOa 3.2.12	5.75.1
P1204	HD 1 MP 720p	3	D	NA	NT	NA	2.10.8	5.40.12
P1311	SD	3	D	Audio in	1 x I 1 x O	NA	2.10.8	NA
P1343	SD	3	D	Audio in	1 x I 1 x O	NA	2.10.8	NA
P1344	HD 1 MP 720p	3	D	Audio in	1 x I 1 x O	NA	2.10.8	NA
P1346	HD 3 MP 1080p	3	D	Audio in	1 x I 1 x O	NA	2.10.8	5.40.9
P1347	HD 5 MP	2	B	Audio in	1 x I 1 x O	NA	2.10.8	5.40.9
P1353[9]	SD	2	B	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	5.40.19.1
P1354	HD 1 MP 720p	3	D	Audio in	1 x I 1 x O	NA	2.10.8	5.40.18
P1355/-E	HD 2 MP 1080p	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.11.27	5.40.19

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
P1357/-E	HD 5 MP	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	5.40.19
P1365	HD 2 MP 1080p	3	D	In: built-in mic or audio in	1 x I	NA	XOa 3.2.12	5.75.2
P1367[10]	3072 x 2048	3	D	In: ext. mic Audio out	Yes	NA	XO 4.3.6	8.30.1
P1405-LE Mk II[11]	HD 2 MP 1080p	3	D	NA	NA	NA	XO 4.2.8	7.20.1
P1425-E/LE/ LE Mk II	HD 2 MP 1080p	3	D	NA	1 x I 1 x O	NA	XOa 3.0.5	5.55.3.2
P1428-E	4K Ultra HD 8 MP	3	D	NA	1 x I 1 x O	NA	XOa 3.0.5	5.55.5.1
P1435-E/ LE[12]	Full HD	3	D	NA	1 x I	NA	XOa 3.2.17	5.85.4.1
P3215-V/VE	HD 2 MP 1080p	3	D	NA	NA	NA	XOa 3.0.5	5.55.3.2
P3225-LVE	HD 2 MP 1080p	3	D	NA	NA	NOK	XOa 3.2.12	5.75.3
P3225-LVE Mk II[13]	HD 2 MP 1080p	3	D	NT	NT	NT	XO 4.2.8	–
P3301/-V	SD	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	NA
P3304	HD 1 MP 720p	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	5.40.9
P3343/-V	SD	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	NA
P3343-VE	SD	3	D	Audio in	1 x I 1 x O	NA	2.10.8	NA
P3344/-V	HD 1 MP 720p	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	NA
P3344-VE	HD 1 MP 720p	3	D	Audio in	1 x I 1 x O	NA	2.10.8	NA
P3346	HD 3 MP	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	5.40.9
P3354	HD 1 MP 720p	3	D	NA	NA	NA	2.11.23	5.40.17
P3364-V/LV/ VE/LVE	HD 1 MP 720p	3	D	In: built-in mic or audio in	NT	NA	XOa 3.0.10	5.40.10
P3365/-V/VE	HD 2 MP 1080p	3	D	Audio in	1 x I 1 x O	NA	XOa 3.0.10	5.55.3.1
P3367/-V/-VE	HD 5 MP	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	5.40.3
P3384	HD 1 MP 720p	3	D	In: built-in mic or audio in	NT	NA	2.10.8	5.40.11

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
P5414-E	HD 1 MP 720p	3	D	NT	4 I or O	Yes	2.11.23	5.55.1
P5512	SD	3	D	NT	NT	Yes	2.10.8	5.25
P5515-E[14]	Full HD	3	D	NA	NA	Yes(iris NA)	XOa 3.2.12	5.85.3
P5522/-	SD	3	D	NT	NT	Yes	2.10.8	5.25.1
P5532/E	SD	3	D	NT	NT	Yes	2.10.8	5.20.1
P5534/-E	HD 1 MP 720p	2	B	NT	4 I or O	Yes	2.10.8	5.15.1
P5624-E[15]	720p	3	D	NA	NA	Yes(iris NA)	XOa 3.2.33	6.20.1
P5635-E[16]	HD 2 MP 1080p	2	B	NT	NT	Yes	XOa 3.2.12	5.75.1
P8221 I/O Audio module[17]	NA	NA	NA	In: ext. mic Audio out	8 x I/O	NA	XO 4.2.8	5.10.2
Q1602	SD	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	5.40.3
Q1604	HD 1 MP 720p	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	2.10.8	5.40.3
Q1614/-E	HD 1 MP 720p	3	D	In: built-in mic or audio in	2 I or O	NA	2.11.23	5.55.1
Q1615	HD 2 MP 1080p	3	D	In: built-in mic or audio in	2 I or O	NA	XOa 3.0.5	5.55.3.3
Q1635	HD 2 MP 1080p	3	D	In: built-in mic or audio in	2 I or O	NA	XOa 3.0.5	5.55.3.5
Q1755	HD 2 MP 1080i	3	D	In: built-in mic or audio in	1 x I 1 x O	Zoom only	2.10.8	NA
Q1765-LE	HD 2 MP 1080p	3	D	NT	2 I or O	Zoom only	2.11.23	5.55.1
Q1921/-E Thermal	SD	2	B	In: built-in mic or audio in	2 I or O	NA	2.10.8	NA
Q2901-E Thermal	SD	2	B	NT	NT	NA	XOa 3.0.10	5.55.4.1
Q3505	HD 2 MP 1080p	3	D	Audio in	2 I or O	NA	XOa 3.0.5	5.55.3.2
Q3709-PVE[18]	3840 x 2160	2	B	NA	NA	NA	XOa 3.2.17	5.75.1.1
Q6032-E	SD	3	D	NA	NA	Yes	2.10.8	NA
Q6035-E	HD 2 MP 1080p	2	B	NT	NT	Yes	2.10.8	5.25
Q6042-E	SD	3	D	NA	NA	Yes	2.11.29	5.55.1.2
Q6044-E	HD 1 MP 720p	3	D	NA	NA	Yes	2.11.23	5.55.1

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
Q6045-E	HD 2 MP 1080p	3	D	NA	NA	Yes	2.11.29	5.55.1.2
Q6045-E-MkII	HD 2 MP 1080p	3	D	NA	NA	Yes	XOa 3.2.12	5.55.6
Q6114-E[19]	HD 1 MP 720p	3	D	NA	NA	Yes	XOa 3.2.12	5.65.2
Q6128-E[20]	4K	3	D	NA	NA	Yes(iris NA)	XOa 3.2.17	5.85.2.1
Q7401 Video Encoder	SD	3	D	Audio in Audio out	4 I or O	Yes[21]	2.10.8	5.20.3
Q7404 Video Encoder	SD	3	D	Audio in	2 I or O	Yes[22]	2.10.8	5.20.1
Q7411 Video Encoder	SD	3	D	Audio in	I: min. 2, max. 4. O: min. 0, max. 2.	Yes[23]	2.10.8	5.40.13.2
V5915	1920 x 1080	3	D	In: ext. mic Audio out	2 x I	Yes	XO 4.2.8	5.75.7.1
C1410-E Network Mini Speaker	NA	NA	NA	In: built-in mic Out: speaker	NA	NA	XO 5.1.9	1.94.1
C1310-E Network Horn Speaker	NA	NA	NA	In: built-in mic Out: speaker	NA	NA	XO 5.1.9	1.97.1

[1] Use camera web interface for privacy mask. After changing between corridor and normal mode, Honeywell recommends to disable and then re-enable the camera in the XO client.

[2] This is an IP speaker, not a camera, but it requires 1 IP video channel on XO devices. This IP audio device has not officially been tested by Honeywell, but was implemented in a specific project.

[3] This is an IP speaker, not a camera, but it requires 1 IP video channel on XO devices.

[4] Privacy mask is not working.

[5] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[6] OSD not working.

[7] Privacy mask only via web interface. OSD not visible on analytics stream.

[8] Brightness/contrast/saturation is not working.

[9] Do NOT rotate or mirror image when defining privacy mask.

[10] Privacy mask only via web interface. OSD not working.

[11] Frame rate is limited to 25 fps. Focus and privacy mask only via web interface. OSD not visible on analytics stream.

[12] Privacy mask only via web interface.

[13] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[14] Only brightness available, no contrast/saturation.

[15] Privacy mask only via web interface.

[16] Manual focus only goes to farthest or nearest point, no focus in between.

[17] This is an IP module that offers audio and I/O, not a camera, but it requires 1 IP video channel on XO devices. Has 8 I/O ports that can be configured as I or O, but max. 4 outputs are usable in XO.

[18] Camera uses 3 channels (3 IP addresses/3 IP channels). 180° panoramic view is not supported. Available resolutions depend on capture mode. Disable camera in XO client before changing the capture mode. OSD via web interface.

[19] Contrast setting not available. Camera is limited to 25 fps.

[20] Contrast setting not available. Privacy mask only in web interface.

[21] PTZ is only available with Axis PTZ driver installed. See www.axis.com to obtain the correct driver.

[22] PTZ is only available with Axis PTZ driver installed. See www.axis.com to obtain the correct driver.

[23] PTZ is only available with Axis PTZ driver installed. See www.axis.com to obtain the correct driver.

Note:

- Audio out over IP is supported from ADPRO device firmware version XOa 3.02.
- Untested camera models: some features may not function; restricted to maximum 2 streams.
- In Windows 7, access to the camera's web interface via the XO client (remote access) is no longer possible for Axis cameras running firmware 7.10 or above. Remote access is possible in Windows 8.1 and Windows 10. For details, see the Axis website:
- https://www.axis.com/global/en/support/technical-notes/browser-support

Cameras Supported by Design

The list above contains only the Axis cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that Axis cameras with a similar design also function correctly. The following Axis cameras are supported by design:

- P5512-E PTZ camera

CHAPTER

9 BRICKCOM

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
CB-100Ae-08	HD 1 MP	2	B	NA	NA	NA	2.10.8	3.1
CB-102Ap	HD 1 MP	2	B	NA	NA	NA	2.10.8	3.1
FB-131Ap-71	HD 1.3 MP	2	B	NA	NA	NA	2.10.8	3.1
FD-100Ap-73-M	HD 1 MP	2	B	NA	NA	NA	2.10.8	3.1
MD-100Ap-00	HD 1 MP	2	B	NA	NA	NA	2.10.8	3.1
OB-100Ap-73	HD 1 MP	2	B	NA	NA	NA	2.10.8	3.1
OSD-040E-36X[1]	SD	2	B	NA	NA	Yes	2.10.8	3.1
VD-100Ap-73	HD 1 MP	2	B	NA	NA	NA	2.10.8	3.1

[1] Up to 25 fps.

Note:

- XX-YYYAp-ZZZ: professional model = up to 30 fps.
- XX-YYYAe-ZZZ: economy model = up to 15 fps.
- Camera configuration: some Brickcom camera types have VMS configuration settings:
  - Disable WS security for these camera types.
  - ONVIF 1.0 (default) / 2.0: both are possible, but 1.0 is recommended.
  - Sync (default) / Async: Sync is recommended.
- Untested camera models: some features may not function; restricted to maximum 2 streams.

CHAPTER

8 BOSCH

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
Autodome IP 5000 HD[1]	1920 x 1080	2	B	In: ext. mic	1 x O	Yes	XO 4.2.8	6.32.0109
Autodome 7000 HD	HD 1080p	2	B	NT	1 x I 1 x O	Yes (focus & iris NA)	2.10.8	5.80.73
Autodome 800 HD Series[2]	HD 1080p	2	B	NT	OK	Yes (focus & iris NA)	2.10.8	5.70.43
Dinion HD 1080p IVA	HD 1080p	2	B	Line in	OK	NA	2.10.8	5.70.43
Dinion HD 720 IVA	HD 720p	2	B	NA	NA	NA	2.11.23	NA
Dinion IP 7000 HD	HD 1080p	2	B	Line in	OK	NA	2.11.29	5.9
Dinion IP Starlight 7000 HD	HD 720p	2	B	NOK	2 x I 1 x O	NA	2.11.29	5.9
Flexidome HD 1080P-HDR-VR-IVA	HD 1080p	2	B	NT	1 x I 1 x O	NA	2.10.8	5.80.73
Flexidome IP outdoor 5000 IR[3]	1920 x 1080	2	B	In: ext. mic	1 x I 1 x O	NA	XOa 3.2.33	6.20.0089
Flexidome IP Dynamic 7000	HD 1080p	2	B	NT	1 x I 1 x O	NA	2.11.29	5.9
Flexidome IP Starlight 7000 RD[4]	1280 x 720	2	B	In: ext. mic	2 x I 1 x O	NA	XOa 3.2.17	6.20.0089 (89500620)
Flexidome NDN-498-P	SD	2	B	NT	OK	NA	2.10.8	5.70.43
Flexidome NDN-921-P	HD 720p	2	B	NT	OK	NA	2.10.8	5.70.43
NDC 225 P	SD	2	B	Line in	OK	NA	2.10.8	5.70.43
NTC-265-PI	HD 720p	2	B	NOK	1 x I 1 x O	NA	2.11.23	5.72.28

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
Flexidome IP 3000i	2 MP	2	B	In: line in Audio out	1 x I 1 x O	NA	XO 4.5.13	7.51.0015
DINION IP Starlight 6000i IR	2 MP	2	B	In: line in Audio out	1 x I 1 x O	NA	XO 4.5.13	6.60.0065

[1] Maximum 15 fps. No brightness/contrast/saturation or privacy mask. OSD and focus only via web interface.

[2] Maximum resolution is 1280 x 720, 15 fps.

[3] Maximum 15 fps. OSD not available; privacy mask only via web interface.

[4] Maximum 15 fps. OSD not available; privacy mask only via web interface.

Note:

- Untested camera models: some features may not function; restricted to maximum 2 streams.

In some cases, you may have to disable B-frames for Bosch cameras to work. In this case, proceed as follows:

Step 1. Open the camera web interface.

Step 2. Go to the Settings page.

Step 3. Choose Advanced Mode > Camera > Encoder Profile.

Step 4. Click the Expert Settings button.

Step 5. In the GOP Structure box, select IP, and then click Set.

Step 6. Repeat the previous step for each available profile (click each profile tab and set as described).

CHAPTER

10 HIKVISION

Hikvision

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
DS-2CD2012-I	HD 1.3 MP	2	B	NA	NA	NA	2.10.8	4.0.8 121109
DS-2CD2023G0-I	2 MP	2	B	NA	NA	NA	XO 4.3.6	5.5.3 build 171025
DS-2CD2032-I	HD 3 MP	2	B	NA	NA	NA	2.10.8	4.0.9 130106
DS-2CD2332-I[1]	HD 3 MP	2	B	NT	NT	NA	XOa 3.0.5	NA
DS-2CD2512F-IWS[2]	HD 1.3 MP	2	B	NT	NT	NA	XOa 3.0.5	NA
DS-2CD2632F-I[3]	HD 3 MP	2	B	NT	NT	NA	XOa 3.0.5	NA
DS-2CD2642FWD-IS[4]	4 MP	2	B	Audio in Audio out	1 x I 1 x O	NA	XO 4.0.7	5.3.6 build 151105
DS-2CD2642FWD-IZ[5]	HD 3 MP	2	B	NA	NA	NA	XOa 3.2.33	5.4.0 160401
DS-2CD2742FWD-IS[6]	4 MP	2	B	Audio in Audio out	1 x I 1 x O	NA	XO 4.0.7	5.3.3 build 150630
DS-2CD2T42WD-I3[7]	HD 4 MP	2	B	NA	NA	NA	XOa 3.2.17	5.3.6 build 151105
DS-2CD2T42WD-I5[8]	HD 4 MP	2	B	NA	NA	NA	XOa 3.2.17	5.3.6 build 151105
DS-2CD2T42WD-I8[9]	HD 4 MP	2	B	NA	NA	NA	XOa 3.2.17	5.3.6 build 151105
DS-2CD4025FWD-A	1280 x 720	2	B	Audio in Audio out	NOK	NA	XOa 3.2.17	5.3.5 build 151218
DS-2CD4B26FWD-IZS[10]	1920 x 1080	2	B	In: ext. mic Audio out	1 x I 1 x O	NA	XO 4.0.7	V5.4.1 build 160503
DS-2CD6412FWD-10	HD 1.3 MP	2	B	Audio in Audio out	1 x I 1 x O	NA	2.11.29	5.2.0 100721
DS-2CD6412FWD-20	HD 1.3 MP	2	B	Audio in	1 x I 1 x O	NA	2.11.29	5.2.0 100721

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
DS-2CD7153-E[11]	HD 2 MP	2	B	NA	NA	NA	2.10.8	4.0.3 121126
DS-2CD762MF-IFB	HD 1.3 MP	2	B	NOK	NA	NA	2.10.8	2.0.121114
DS-2CD8153F-E	HD 2 MP	2	B	NOK	NA	NA	2.10.8	5.0.8 130930
DS-2CD833F-E[12]	SD	2	B	NOK	1 x I 1 x O	NA	2.10.8	4.0.3 121126
DS-2CD883F-E[13]	HD 5 MP	2	B	Audio in Audio out	1 x I 1 x O	NA	2.10.8	4.0.3 121126
DS-2DE4A220IW-DE	1920 x 1080	2	B	In: ext. mic Audio out	2 x I 2 x O	Yes, focus NOK	XO 4.2.8	5.4.8 build 170210 / 5.5.0 build 170724
DS-2DE5220I-AE[14]	Full HD	2	B	In: ext. mic Audio out	2 x I 1 x O	Yes, focus and iris NOK	XOa 3.2.33	V5.3.8 build 150707
DS-2DE5220IW-AE[15]	1920 x 1080	2	B	In: ext. mic Audio out	2 x I 1 x O	Yes, iris NOK	XO 4.2.8	V5.4.8 build 170210
DS-2DF1-512	SD	2	B	NOK	2 x I 2 x O	Yes	2.10.8	3.1.6 130322
DS-2DF7284-A	HD 2 MP	2	B	Audio in	NT	Yes	XOa 3.0.5	5.1.8 140616
DS-2DF7286-AEL[16]	Full HD	2	B	In: ext. mic Audio out	7 x I 2 x O	Yes, focus and iris NOK	XOa 3.2.33	5.4.0 160613

[1] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[2] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[3] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[4] Inputs only work if arming schedule is enabled in web interface: Configuration > Event > Basic Event > Alarm input > Arming schedule.

[5] Privacy mask only via web interface. Analytic resolution is 512 x 288 or 509 x 288 depending on event resolution. Recorded resolution is 352 x 288.

[6] Inputs only work if arming schedule is enabled in web interface: Configuration > Event > Basic Event > Alarm input > Arming schedule.

[7] Frame rate is limited for certain resolutions. If you select an unsupported frame rate, the frame rate falls back to 1 fps. Max. 20 fps @ 2688 × 1520; 25 fps @ 1920 × 1080; and 25 fps @ 1280 × 720. Supported fps values are: 1, 2, 4, 6, 8, 10, 12, 15, 16, 18, 20, 22, and 25. The analytics resolution is CIF, but is displayed as 509 x 288 in the Info pane in the XO client.

[8] Frame rate is limited for certain resolutions. If you select an unsupported frame rate, the frame rate falls back to 1 fps. Max. 20 fps @ 2688 × 1520; 25 fps @ 1920 × 1080; and 25 fps @ 1280 × 720. Supported fps values are: 1, 2, 4, 6, 8, 10, 12, 15, 16, 18, 20, 22, and 25. The analytics resolution is CIF, but is displayed as 509 x 288 in the Info pane in the XO client.

[9] Frame rate is limited for certain resolutions. If you select an unsupported frame rate, the frame rate falls back to 1 fps. Max. 20 fps @ 2688 × 1520; 25 fps @ 1920 × 1080; and 25 fps @ 1280 × 720. Sup-

ported fps values are: 1, 2, 4, 6, 8, 10, 12, 15, 16, 18, 20, 22, and 25. The analytics resolution is CIF, but is displayed as 509 x 288 in the Info pane in the XO client.

[10] Autofocus can be enabled via web interface. I/O must be enabled in web interface.

[11] Do not upgrade the camera firmware as newer firmware does not support the same interface as used by the ADPRO device.

[12] Do not upgrade the camera firmware as newer firmware does not support the same interface as used by the ADPRO device.

[13] Do not upgrade the camera firmware as newer firmware does not support the same interface as used by the ADPRO device.

[14] Frame rate is limited to 25 fps. 5 fps not available.

[15] Iris and privacy mask only via web interface. Enable I/O in web interface. Preset position 0 not supported.

[16] Privacy mask only via web interface.

Note:

- Added support for Hikvision firmware Version 5.
- Audio out over IP is available from ADPRO device firmware version XOa 3.02.
- Untested camera models: some features may not function; restricted to maximum 2 streams.
- H.265 on Hikvision cameras is supported with XO 4.2 and above.

Usage of Hikvision Camera Firmware 5.5.0:

If you upgrade your Hikvision cameras to firmware version 5.5.0, the cameras will no longer work on XO (detected on XO 4.00.0007 with Hikvision firmware 5.5.0 build 170724). The new firmware automatically disables the Hikvision CGI Protocol which is used by ADPRO XO. This will block any communication.

It is not possible to revert the Hikvision firmware to a previous version.

However, you can easily fix this by manually enabling the CGI protocol in the camera web interface.

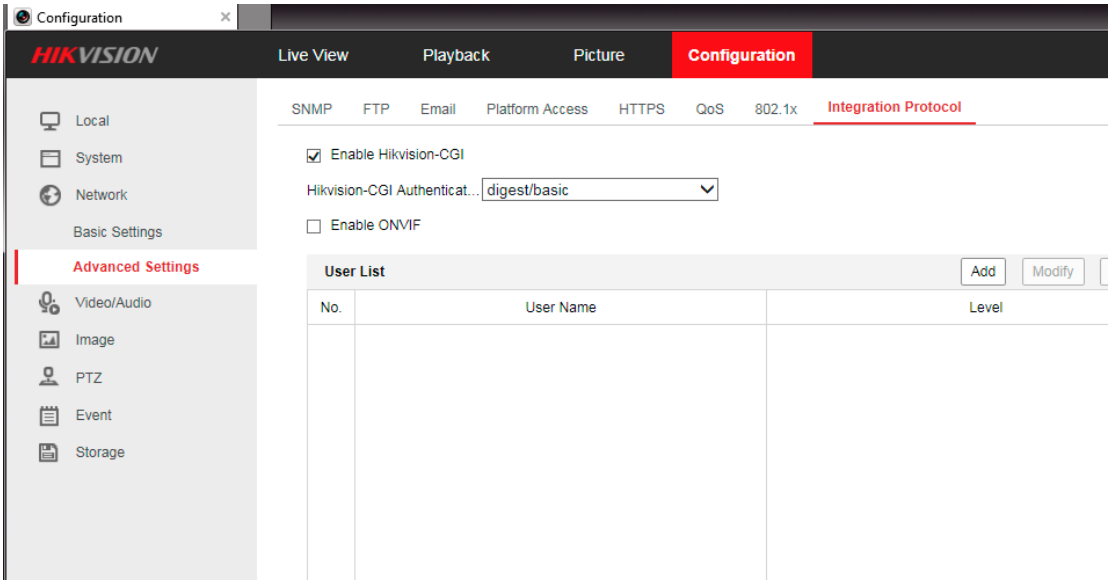
To fix the issue, proceed as follows:

Step 1. Open the Hikvision camera web interface.

Step 2. Click the **Configuration** tab.

Step 3. In the menu on the left, click **Advanced Settings**.

Step 4. Click the **Integration Protocol** tab.



Step 5. Select the **Enable Hikvision-CGI** checkbox.

Step 6. In the **Hikvision-CGI Authenticat...** box, select **digest/basic**.

Step 7. Save the settings.

AVE

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
AVE-IP3EXIRBN1	3 MP	2	B	NA	NA	NA	XOa 3.2.12	V5.2.0 141016
AVE-IP3EXTNH2	3 MP	2	B	NA	NA	NA	XOa 3.2.12	V5.2.0 141016

Note:

- Use Hikvision drivers for these AVE cameras.
- Maximum 20 fps at highest resolution.
- Untested camera models: some features may not function; restricted to maximum 2 streams.

CHAPTER

11 HONEYWELL

Type	Resolution	# of video streams	Video stream behavior	Audio	I/O	PTZ	ADPRO device FW	Cam FW
C1210-E Network Ceiling Speaker	N/A	N/A	N/A	In: built-in mic Out: speaker	N/A	N/A	XO 5.3.12	-
H2W2PC1M	2 MP	2	B	In: built-in mic Audio out	N/A	N/A	XO 4.3.6	1.000.HW01.1 build: 2018-09-26
H2W2PRV3	1920x 1080	2	B	In: built-in mic	N/A	N/A	XO 4.2.8	1.000.HW01.0.R build: 2016-11-14
H3W2GR1[1]	1920x 1080	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
H3W2GR1V	2 MP	2	B	Audio out	2 x I 1 x O	N/A	XO 4.3.6	1.000.0000.13 build: 2018-11-28
H3W2GR2[2]	1920x 1080	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
H3W4GR1[3]	2688x 1520	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
H4D3PRV2[4]	3 MP	2	B	N/A	N/A	Zoom and manual focus	XOa 3.2.33	1.000.HW00.0.R, build: 2016-03-28
H4D3PRV3[5]	3 MP	2	B	N/A	N/A	N/A	XOa 3.2.33	1.000.HW00.0.R, build: 2016-03-28
H4D8GR1[6]	12 MP	2	B	NOK	2 x I 1 x O	N/A	XO 4.0.7	2.420.HW00.14 build: 2017-02-13
H4L2GR1[7]	1920x 1080	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XO 4.5.7	V2.420.HW01.33.20190812

Type	Resolution	# of video streams	Video stream behavior	Audio	I/O	PTZ	ADPRO device FW	Cam FW
H4L6GR2[8]	6 MP	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XO 4.2.10	1.000.HW00.1 build: 2017-08-06
H4W2GR1[9]	1920x 1080	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
H4W2GR1V	2 MP	2	B	Audio out	2 x I 1 x O	NA	XO 4.5.7	V1.000.0000.19.20190819
H4W2GR2[10]	1920x 1080	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
H4W4GR1[11]	2688x 1520	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
H4W4GR1V	4 MP	2	B	Audio out	N/A	N/A	XO 4.5.7	V1.000.0000.19.20190819
HBD1PR1[12]	1280x 960	2	B	N/A	N/A	N/A	XOa 3.2.33	1.000.HW00.0.R, build: 2016-03-28
HBD2PR1X	Full HD	2	B	N/A	N/A	N/A	XOa 3.2.17	2.100.HW00.0.R, build: 2015-06-05
HBD3PR1[13]	3 MP	2	B	N/A	N/A	N/A	XOa 3.2.33	1.000.HW00.0.R, build: 2016-03-28
HBD3PR2[14]	3 MP	2	B	N/A	N/A	Zoom and manual focus	XOa 3.2.33	1.000.HW00.0.R, build: 2016-03-28
HBD8GR1[15]	12 MP	2	B	NT	2 x I 1 x O	Zoom and focus	XO 4.0.7	2.420.HW00.14, build: 2016-10-31
HBL2GR1[16]	1920x 1080	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	2.420.HW00.14.R build: 2016-11-30
HBL2GR1V	2 MP	2	B	Audio out	N/A	N/A	XO 4.3.6	1.000.0000.10, build: 2018-05-29
HBL6GR2[17]	6 MP	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XO 4.5.7	V1.000.HW02.8.20190813
HBW2GR1	1920x 1080	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
HBW2GR1V	2 MP	2	B	Audio out	N/A	N/A	XO 4.3.6	1.000.0000.9, build: 2018-05-25
HBW2GR3[18]	1920x 1080	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
HBW2GR3V	2 MP	2	B	Audio out	N/A	N/A	XO 4.3.6	1.000.0000.9, build: 2018-05-25

Type	Resolution	# of video streams	Video stream behavior	Audio	I/O	PTZ	ADPRO device FW	Cam FW
HBW4GR1[19]	2688x1520	2	B	In: line in Audio out	2 x I 1 x O	Zoom and focus	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
HBW4PER2[20]	4 MP	2	B	N/A	N/A	N/A	XO 4.2.10	1.000.HW01.1 build: 2018-03-06
HBW4PGR1[21]	4 MP	2	B	N/A	N/A	N/A	XO 4.3.6	V5.5.52 build 180921
HBW8PR2	8 MP	2	B	N/A	N/A	N/A	XO 4.5.7	1.000.HW01.3.20190820
HCD8G	12 MP	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	N/A	XO 4.2.8	2.420.HW00.14 build: 2017-02-13
HCL2G[22]	1920x1080	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	N/A	XOa 3.2.33	2.420.HW00.14.R build: 2016-11-30
HCW2G[23]	1920x1080	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	N/A	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
HCW4G[24]	2688x1520	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	N/A	XOa 3.2.33	1.000.HW00.0.R build: 2016-11-14
HDZ302D / HDZ302DIN[25]	1080p	2	B	In: line in Audio out	2 x I 1 x O	Yes	XO 4.2.8	1.000.0028.0 build: 2017-03-27
HDZ302DE[26]	1080p	2	B	In: line in Audio out	7 x I 2 x O	Yes	XO 4.2.8	1.000.0028.0 build: 2017-03-27
HDZ302LIK[27]	1080p	2	B	In: line in Audio out	7 x I 2 x O	Yes, no auto-focus or iris	XO 4.5.7	V1.000.0062.3.20190816
HDZ302LIW[28]	1080p	2	B	In: line in Audio out	7 x I 2 x O	Yes, no auto-focus or iris	XOa 3.2.33	1.000.0014.0.R.3 build: 2016-09-26
HDZP252DI[29]	Full HD	2	B	In: line in	1 x I 1 x O	Yes	XO 4.2.8	2.422.0001.9, build: 2017-03-10
HED1PR3[30]	1280x960	2	B	N/A	N/A	N/A	XOa 3.2.33	1.000.HW00.0.R, build: 2016-03-28
HED3PR3[31]	3 MP	2	B	N/A	N/A	N/A	XOa 3.2.33	1.000.HW00.0.R, build: 2016-03-28
HEW4PER2	4 MP	2	B	N/A	N/A	N/A	XO 4.3.6	1.000.HW01.1 build: 2018-09-26
HFD6GR1[32] Fisheye	6 MP	2	B	In: built-in mic or line in Audio out	2 x I 2 x O	N/A	XO 4.5.7	V1.000.HW00.12.20190819
HFD8GR1[33] Fisheye	8 MP	2	B	In: built-in mic or line in Audio out	2 x I 2 x O	N/A	XO 4.2.8	1.000.HW00.0 build: 2017-02-13

Type	Resolution	# of video streams	Video stream behavior	Audio	I/O	PTZ	ADPRO device FW	Cam FW
HPW2P1 pinhole	2 MP	2	B	N/A	N/A	N/A	XO 4.3.6	1.000.HW01.1 build: 2018-09-26
HC30W42R3	2 MP	2	B	N/A	N/A	N/A	XO 4.5.7	1.0.18.20190523
HC30W45R3	5 MP	2	B	N/A	N/A	N/A	XO 4.5.7	1.0.9.20190422
HC30WB2R1	2 MP	2	B	N/A	N/A	N/A	XO 4.5.7	1.0.18.20190523
HC30WB5R1	5 MP	2	B	N/A	N/A	N/A	XO 4.5.7	1.0.18.20190523
HC30WB5R2	5 MP	2	B	N/A	N/A	N/A	XO 4.5.7	1.0.18.20190523
HC30WF5R1	5 MP	2	B	Yes	N/A	N/A	XO 4.5.7	1.0.18.20190523
H4L2GR1V	2 MP	2	B	Yes	N/A	N/A	XO 4.5.7	1.0.19. 20190819
HCL2GV	2 MP	2	B	Yes	N/A	N/A	XO 4.5.7	1.0.19. 20190819
HC30WE5R3	5 MP	2	B	NA	N/A	N/A	XO 4.5.7	1.0.18.20190523
HC30W45R2	5 MP	2	B	NA	N/A	N/A	XO 4.5.7	1.0.18.20190523
HC30WE2R3	2 MP	2	B	NA	N/A	N/A	XO 4.5.7	1.0.18.20190523
HC30WE5R2	5 MP	2	B	NA	N/A	N/A	XO 4.5.7	1.0.18.20190523
H4W4PER3	4 MP	2	B	NA	N/A	N/A	XO 4.5.7	1.000.HW01.3 Build Date:2019-08-20
HDZP304DI	4 MP	2	B	In: line in	1 x I 1 x O	Yes	XO 4.5.7	1.0.18.20190523
HBW4GR1V	4 MP	2	B	In: line in	1 x I 1 x O	N/A	XO 4.5.7	1.000.0008.0, Build Date:2018-03-02
HM4L8GR1	8 MP	2	B	In: line in Audio out	2 x I 2 x O	N/A	XO 4.5.13	1.000.HW03.0, Build Date: 2020-04-09
HC60W45R2	5 MP	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	N/A	XO 4.5.7	1.0.10.20200422
HC60W35R4	5 MP	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	N/A	XO 4.5.7	1.0.10.20200422
HC60WB5R5	5 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.7	1.0.10.20200422
HC60WB5R2	5 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.7	1.0.10.20200422
HC60W35R2	5 MP	2	B	In: built-in mic or line in Audio out	2 x I 1 x O	N/A	XO 4.5.7	1.0.10.20200422
HC60W45R4	5 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.7	1.0.10.20200422
HC60WZ2E30	2 MP	2	B	In: line in Audio out	4 x I 2 x O	Yes	XO 4.5.13	0.1.22.20200508
HC60W34R2L	4 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.13	1.0.20.20200814
HC60W44R2	4 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.13	1.0.20.20200814

Type	Resolution	# of video streams	Video stream behavior	Audio	I/O	PTZ	ADPRO device FW	Cam FW
HC60W44R2L	4 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.13	1.0.20.20200814
HC60WB4R2	4 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.13	1.0.20.20200814
HC60W34R2	4 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.13	1.0.20.20200814
HC60WB4R2L	4 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 4.5.13	1.0.20.20200814
HC30W25R3	5 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.9	2.0.5.20201023
H4W2PER3V	2 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
H4W2PER2	2 MP	2	B	N/A	N/A	N/A	XO 5.3.12	V1.000.HW01.9.20220711
H4W2PER2V	2 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HBW2PER1V	2 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HBW2PER2V	2 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HEW2PER3V	2 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HEW2PER2V	2 MP	2	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
H4W4PER3V	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
H4W4PER2V	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HBW4PER1V	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HBW4PER2V	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HEW4PER3V	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HEW4PER2V	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
H2W4PER3V	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
H4W8PER2V	8 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HBW8PER2V	8 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HEW8PER2V	8 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323

Type	Resolution	# of video streams	Video stream behavior	Audio	I/O	PTZ	ADPRO device FW	Cam FW
H4W8PER1V	8 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HBW8PER1V	8 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
HEW8PER1V	8 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.210323
H4W4GR1Y	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.20210710
H3W4GR1Y	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.20210710
HBW4GR1Y	4 MP	3	B	In: line in Audio out	2 x I 1 x O	N/A	XO 5.1.10	V1.000.HW01.0.20210710
HDZ408LIWV	8 MP	3	B	In: line in Audio out	7 x I 2 x O	Yes	XO 5.1.10	V1.000.HW00.1.20210601
HDZ402LIWV	2 MP	3	B	In: line in Audio out	7 x I 2 x O	Yes	XO 5.1.10	V1.000.HW00.1.20210601
HDZ404LIWV	4 MP	3	B	In: line in Audio out	7 x I 2 x O	Yes	XO 5.1.10	V1.000.HW00.1.20210601
HDZ402LIKV	2 MP	3	B	In: line in Audio out	7 x I 2 x O	Yes	XO 5.1.10	V1.000.HW00.1.20210601
HDZ404LIKV	4 MP	3	B	In: line in Audio out	7 x I 2 x O	Yes	XO 5.1.10	V1.000.HW00.1.20210601
HDZ408LIKV	8 MP	3	B	In: line in Audio out	7 x I 2 x O	Yes	XO 5.1.10	V1.000.HW00.1.20210601
HC60WZ5R30	5 MP	3	B	In: line in Audio out	2 x I 1 x O	Yes	XO 5.1.10	v0.1.17.20210226
HC30W25R3-12V	5 MP	3	B	Built-in Microphone	N/A	N/A	XO 5.1.10	v2.0.11.20210224
HC35LB8R2	8 MP	3	B	In: Line in or Build-in mic Audio Out	1 x I 2 x O	Zoom and focus	XO 5.3.12	HC1.22.2.42.20221104
HC35W43R3	3 MP	3	B	N/A	N/A	N/A	XO 5.2.5	HC1.22.1.6.20220228
HC35WB3R3	3 MP	3	B	N/A	N/A	N/A	XO 5.3.12	HC1.22.1.6.20220228
HC35WE3R3	3 MP	3	B	N/A	N/A	N/A	XO 5.3.12	HC1.22.1.6.20220228
HC35W43R2	3 MP	3	B	N/A	N/A	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35WB3R2	3 MP	3	B	N/A	N/A	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35WE3R2	3 MP	3	B	N/A	N/A	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35W45R3	5 MP	3	B	In: Line in Audio Out	1 x I 1 x O	N/A	XO 5.3.12	HC1.22.1.6.20220228

Type	Resolution	# of video streams	Video stream behavior	Audio	I/O	PTZ	ADPRO device FW	Cam FW
HC35WB5R3	5 MP	3	B	In: Line in Audio Out	1 x I 1 x O	N/A	XO 5.3.12	HC1.22.1.6.20220228
HC35WB5R5	5 MP	3	B	Zoom and focus	1 x I 2 x O	Zoom and focus	XO 5.3.12	HC1.22.2.42.20221104
HC35WE5R3	5 MP	3	B	In: Line in Audio Out	1 x I 1 x O	N/A	XO 5.3.12	HC1.22.1.6.20220228
HC35W25R3	5 MP	3	B	In: Line in Audio Out	1 x I 1 x O	N/A	XO 5.3.12	HC1.22.1.6.20220228
HC35W45R2	5 MP	3	B	In: Line in Audio Out	1 x I 1 x O	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35WB5R2	5 MP	3	B	In: Line in Audio Out	1 x I 1 x O	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35WE5R2	5 MP	3	B	In: Line in Audio Out	1 x I 1 x O	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35W48R3	8 MP	3	B	In: Line in or Build-in mic Audio Out	1 x I 1 x O	N/A	XO 5.3.12	HC1.22.1.6.20220228
HC35WB8R3	8 MP	3	B	In: Line in Audio Out	1 x I 1 x O	N/A	XO 5.3.12	HC1.22.1.6.20220228
HC35WE8R3	8 MP	3	B	In: Line in Audio Out	1 x I 1 x O	N/A	XO 5.3.12	HC1.22.1.6.20220228
HC35W48R2	8 MP	3	B	In: Line in Audio Out	1 x I 1 x O	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35WB8R2	8 MP	3	B	In: Line in Audio Out	1 x I 1 x O	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35WE8R2	8 MP	3	B	In: Line in Audio Out	1 x I 1 x O	Zoom and focus	XO 5.3.12	HC1.22.1.6.20220228
HC35WZ2R25	2 MP	3	B	In: Line in Audio Out	2 x I 2 x O	Yes	XO 5.3.12	HC1.22.1.6.20220228
HC35WZ5R30	5 MP	3	B	In: Line in Audio Out	2 x I 2 x O	Yes	XO 5.3.12	HC1.22.1.6.20220228
HC35WZ5R30W	5 MP	3	B	In: Line in Audio Out	7 x I 2 x O	Yes	XO 5.3.12	HC1.22.2.42.20221104

[1] Frame rate is limited to 25 fps. For audio in via built-in mic: in camera web interface, set Audio in type to Mic. Enable I/O in camera web interface (Alarm Setup > Alarm > Enable).

[2] Frame rate is limited to 25 fps. For audio in via built-in mic: in camera web interface, set Audio in type to Mic. Enable I/O in camera web interface (Alarm Setup > Alarm > Enable).

[3] Frame rate is limited to 20 fps at 2688 x 1520 and 2560 x 1440, 25 fps at all other resolutions. For audio in via built-in mic: in camera web interface, set Audio in type to Mic; for audio in via external mic:

set to Line in. Enable I/O in camera web interface (Alarm Setup > Alarm > Enable).

[4] Frame rate is limited to 20 fps at 3 MP, and 25 fps at lower resolutions.

[5] Frame rate is limited to 20 fps at 3 MP, and 25 fps at lower resolutions.

[6] Enable I/O in camera web interface. If streaming @ 12 MP, use max. 12 cameras on one ADPRO device.

[7] Frame rate is limited to 25 fps. Enable I/O in camera web interface.

[8] Set main and substream manually to H.264 in the camera web interface. Corridor mode does not work. Enable I/O in camera web interface. Default camera settings will use the output for events. Check and adapt wherever required. Audio out with XO firmware version 4.3 and above. Set the audio out sample rate to 8k in the camera web interface.

[9] Frame rate is limited to 25 fps. Enable I/O in camera web interface.

[10] Frame rate is limited to 25 fps. Enable I/O in camera web interface.

[11] Frame rate is limited to 20 fps at 2688 x 1520 and 2560 x 1440, 25 fps at all other resolutions. Enable I/O in web interface.

[12] Frame rate is limited to 25 fps.

[13] Frame rate is limited to 20 fps at 3 MP (2304 x 1296) resolution.

[14] Frame rate is limited to 20 fps at 3 MP (2304 x 1296) resolution.

[15] This camera model has not officially been tested by Honeywell, but was implemented in a specific project. If streaming @ 12 MP, use max. 12 cameras on one ADPRO device.

[16] Frame rate is limited to 25 fps.

[17] Set main and substream manually to H.264 in the camera web interface. Corridor mode does not work. Enable I/O in camera web interface. Default camera settings will use the output for events. Check and adapt wherever required. Audio out with XO firmware version 4.3 and above. Set the audio out sample rate to 8k in the camera web interface.

[18] Enable I/O in web interface. Disable the audio stream on the sub-stream (analytics); as this may cause 'NO VIDEO'.

[19] Frame rate is limited to 20 fps at 2688 x 1520 and 2560 x 1440, 25 fps at all other resolutions.

[20] Resolution displayed in XO client is 512x288; quad pictures are 352x288. 4 MP res can handle up to 20 fps. Corridor mode: camera must be re-enabled in XO client before option is visible.

[21] For use with Profile T driver: set the streams manually to H.265 in the camera web interface.

[22] Frame rate is limited to 25 fps. Use web interface for focus.

[23] Frame rate is limited to 25 fps. Use web interface for focus. Enable I/O in web interface.

[24] Frame rate is limited to 20 fps at 2688 x 1520 and 2560 x 1440, 25 fps at all other resolutions. Enable I/O in web interface. Use web interface for focus.

[25] Frame rate is limited to 25 fps. Use web interface for autofocus and iris. Enable I/O in web interface.

[26] Frame rate is limited to 25 fps. Use web interface for autofocus and iris. Enable I/O in web interface.

[27] Frame rate is limited to 25 fps. Enable I/O in web interface. Contrast not available. To control IR lights via XO client, set IR lights to manual control in the web interface (Setup > Peripheral > IR Lights).

[28] Frame rate is limited to 25 fps. Enable I/O in web interface. Contrast not available. Wiper and IR lights are controllable via XO client (Live Video) from version XO 4.0. Set IR lights to manual control in the web interface (Setup > Peripheral > IR Lights).

[29] Analytics resolution is 352 x 288 but rendered in XO for live/recording at 512 x 288. Quad pics are 352 x 288.

[30] Frame rate is limited to 25 fps.

[31] Frame rate is limited to 20 fps at highest resolution; 25 fps for other resolutions.

[32] Use Ceiling Mode and Fisheye only (Setup > Camera Settings > Properties > Fisheye). Enable I/O in web interface.

[33] Use Ceiling Mode and Fisheye only (Setup > Camera Settings > Properties > Fisheye). Enable I/O in web interface.

Note:

- For audio out: in the camera web interface, choose Setup > Audio Setup > Audio and **enable** the audio stream on the sub-stream (analytics), and set the speaker volume to the maximum value.
    - Audio out over IP for Honeywell cameras is only available with ADPRO firmware version XO 4.0 and above. New firmware may be required; check the list for the correct firmware version and build.
- OSD and privacy mask only via web interface.
- For H3W2GR1, H3W2GR2, H3W4GR1, H4W2GR1, H4W2GR2, H4W4GR1, HBW2GR1, HBW2GR3, HBW4GR1, HCW2G, HCW4G, and HDZ302D (depending on selected resolutions):
    - Analytics image has a 4:3 aspect ratio, this is the **cropped** 16:9 image. The cut-off parts are not taken into account for alarm events including analytics; detection will not occur in the cut-off parts. Quad/live alarm images are produced from the cropped stream. Set up the system (analytics, PIR detector FOV, double-knock...) from the cropped analytics stream, not from the high-resolution live stream.
- For H2W2PRV3, H4D3PRV2, H4D3PRV3, H4L2GR1, H4L6GR2, HBD1PR1, HBD2PRX, HBD3PR1, HBD3PR2, HBL2GR1, HBL6GR2, HBW4PER2, HCL2G, HDZ302LIK, HDZ302LIW, HED1PR3, HED3PR3, HDZ302D, HDZ302DE, and HDZ302DIN (depending on selected resolutions):
    - Analytics image has a 4:3 aspect ratio, but has a 16:9 image **squeezed** into it. This distorts the horizontal dimensions in the calibration for analytics applications such as IntrusionTrace; it makes detection unreliable. Make sure to perform bounding box calibration for this camera.
- Corridor mode in the camera is supported with XOa 3.02.0033; with XO 4 it is also supported with analytics.
- Although Honeywell IP cameras allow the backslash character “\” in passwords, the XO device cannot handle this. Use a camera password without backslash characters.
- H.265 on Honeywell cameras is supported with firmware version XO 4.3 and above.

Cameras Supported by Design

The list above contains only the Honeywell cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that Honeywell cameras with a similar design also function correctly. The following Honeywell cameras are supported by design:

- H2W2GR1

Supported Honeywell Performance Series HQA DVRs:

The XO 4.5 firmware supports the Honeywell Performance Series HQA DVRs for accessing high-quality analogue video over IP on the XO devices. The following models are supported:

- HRHQ1080 / HRHQ1160: 8/16 channels, without hard disk (firmware V1.000.00HW001.1.190822)
- HRHT4040 / HRHT4080 / HRHT4160: 4/8/16 channels, without hard disk (firmware V1.000.00HW001.2.190822)

The following limitations apply:

- The HRHQ/HRHT only has 2 streams per camera available.
- The HRHQ/HRHT low-resolution stream is CIF.
- The HRHQ/HRHT firmware has a max. GOP (= I-frame distance) of 2 s, whereas XO normally sets the GOP to 4 s.
- The HRHQ/HRHT does not accept ONVIF stream settings from XO:
  - You have to manually duplicate the stream settings in the HRHQ/HRHT web interface:
  - **For the low-res stream**: CIF/5 s/VBR.
  - **For the high-res stream**: use the resolution/fps/VBR settings of your choice.
  - You have to set the stream GOP size in the HRHQ/HRHT web interface to 2 s.
- If you change the password in the HRHQ/HRHT web interface, the password will not be updated for connection through ONVIF. You can only use the original admin password which was set up when first starting the device.
- The following cameras support Camera Sabotage (Tampering) Event: H3W2GR1, H4W2PER2, H4W2PER2V, HDZ302LIW

CHAPTER

12 JVC

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
VN-H157WPU	HD 1080p	2	B	In: ext. mic	2 x I 2 x O	NA	2.11.23	4.05.013
VN-H237	HD 1080p	2	B	NA	NA	NA	XOa 3.0.5	6.00.011
VN-H257VPBU	HD 1080p	2	B	NA	2 x I 2 x O	Zoom	2.11.29	6.01.006
VN-H37U	HD 1080p	2	B	NA	NA	NA	2.11.23	NA
VN-H557U	HD 1080p	2	B	In: ext. mic	2 x I 2 x O	Yes	2.11.23	1.0.524 spl2971
VN-H57U	HD 1080p	2	B	In: ext. mic	2 x I 2 x O	NA	2.10.8	4.05.013
VN-H657WP/WPB	HD 1080p	2	B	NA	2 x I 2 x O	Yes	XOa 3.0.10	2.0.801 spl2841
VN-T16U	SD	2	B	NOK	NOK	NA	2.10.8	2.2.22.32
VN-T216 VPRU	SD	2	B	NA	NOK	NA	2.11.23	j.2.2.2232

Note:

- No support for brightness/contrast/saturation.
- Untested camera models: some features may not function; restricted to maximum 2 streams.

CHAPTER

13 PANASONIC

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
WV-NW502S	HD 1.3 MP	2	B	Audio in	External I/O	NA	2.10.8	1.32
WV-SFN631L[1]	HD 3 MP	3	D	Audio in	3 x I	NA	XOa 3.2.12	1.82
WV-SFV631L[2]	HD 3 MP	3	D	Audio in	3 x I	NA	XOa 3.2.33	2.5
WV-SP105	HD 1.3 MP	2	B	NA	NA	NA	2.11.23	1.03
WV-SPN631	HD 3 MP	2	B	Audio in	3 x I	NA	XOa 3.0.5	1.55
WV-SPW531L[3]	3 MP 2048 x 1536	3	D	In: ext. mic	NOK	Yes	XO 4.2.8	2.56
WV-SPW631LT[4]	3 MP 2048 x 1536	3	D	In: ext. mic	NOK	Yes	XO 4.2.8	2.56
WV-SW316L	HD 1.3 MP	2	B	Audio in	NT	NA	2.10.8	1.49
WV-SW355E	HD 1.3 MP	2	B	Audio in	External I/O	NA	2.10.8	1.07
WV-SW395	HD 1.3 MP	2	B	Audio in	External I/O	Yes	2.10.8	1.07
WV-SW559	HD 1.3 MP	2	B	NT	NT	NA	2.10.8	NA
WV-SW598	HD 1080p	2	B	NA	3 x I	Yes	2.11.23	1.09

[1] Zoom and brightness only available via web interface.

[2] Privacy mask and brightness only via web interface. No saturation or contrast.

[3] Brightness, contrast, saturation not working. Use web interface for pan and focus. Use web interface for privacy mask.

[4] Brightness, contrast, saturation not working. Use web interface for zoom and focus. Use web interface for privacy mask.

Note:

- Compared to similar IP cameras, Panasonic uses significantly higher bandwidth.
- Untested camera models: some features may not function; restricted to maximum 2 streams.

CHAPTER

14 PELCO

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
D5118-FW1[1]	HD 1.3 MP	2	B	NOK	NOK	Yes	2.10.8	NA
IM119[2]	1280x960	2	B	NA	1 x O	NOK[3]	XOa 3.2.17	2.1.2.0.8280-A0.0
IX10	HD 1.3 MP	2	B	NOK	NOK	NA	2.10.8	NA
IX30[4]	HD 3.1 MP	2	B	NOK	NOK	NA	2.10.8	1.7.19.9080 A1.5842
IXE20[5]	HD 2.1 MP	2	B	NOK	NOK	NA	2.10.8	1.7.8.9081 A1.5288
IXS0	SD	2	B	NOK	NOK	NA	2.10.8	1.6.13.9080 A1.4657
Spectra HD S5230	HD 2MP	2	B	NT	NT	Yes	XOa 3.0.5	1.9.2.23
TI314-X Thermal	384 x 288	2	B	NOK	NOK	NA	2.10.8	1.8.2.18-20121109 -1.9441-O4.8503

[1] Maximum resolution is 1280 x 960.

[2] Disable audio in XO client. No OSD or privacy mask.

[3] Zoom and focus only available via web interface.

[4] Maximum resolution is 1600 x 1200.

[5] Maximum resolution is 1600 x 1200.

Note:

- Highest resolution cannot be selected.
- Pelco does not report a detailed cam type to FastTrace 2E or iFT Series.
- Single stream operation: both Pelco streams must have the same aspect ratio. Therefore, in the XO client, you will only see a list of resolutions with the same aspect ratio as stream 1. If you want to use a different aspect ratio, you must change the aspect ratio of stream 1 in the camera's web interface first.
- Untested camera models: some features may not function; restricted to maximum 2 streams.

CHAPTER

15 SAMSUNG

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
SNB-1000	SD	3	D	Audio in	1 x I 1 x O	NA	2.10.8	NA
SNB-5000	HD	3	D	Audio in	1 x I 1 x O	NA	2.10.8	V3.01
SNB-5004[1]	HD	3	D	Audio in	1 x I 1 x O	NA	2.11.23	1.13_131218
SNB-6004[2]	Full HD	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	XOa 3.2.12	3.01_140804
SND-5061[3]	HD	3	D	NA	NOK	NA	2.11.23	1.21_131002
SND-5061P[4]	HD	3	D	NA	NOK	NA	2.11.29	1.21_131002
SND-5084[5]	HD	3	D	In: built-in mic or audio in	1 x I 1 x O	NA	XOa 3.0.5	1.13_131218
SND-L6083R[6]	1920 x 1080	3	D	In: built-in mic	NA	NA	XOa 3.2.33	1.01_150918
SNF-7010[7]	HD	3	D	Audio in	NA	NA	2.11.23	1.00_130806
SNO-5080R[8]	HD	3	D	NA	1 x I 1 x O	NA	2.11.29	3.22_131228
SNO-L6083R[9]	1920 x 1080	3	D	Audio in	NA	NA	XOa 3.2.33	1.01_150918
SNP-3120	SD	3	D	Audio in	1 x I 1 x O	Yes	2.10.8	NA
SNP-6200RH[10]	HD 2 MP	3	D	Audio in	4 x I 2 x O	Yes	XOa 3.0.5	NA

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
SNP-6321H[11]	Full HD	2	B	Audio in[12]	4 x I 2 x O	Yes, focus NOK	XOa 3.2.17	S/W 1.02_150918 ISP 1.02_150918
SNP-L5233H[13]	1280 x 1024	3	D	In: ext. mic	4 x I 2 x O	Yes, focus NOK	XO 3.2.33	1.00_160304
SNP-L6233H[14]	1920 x 1080	3	D	In: ext. mic[15]	4 x I 2 x O	Yes, focus & iris NOK	XOa 3.2.33	1.00 160304
SNV-3120	SD	3	D	Audio in	1 x I 1 x O	Yes	2.10.8	NA
SNV-5080P[16]	HD	3	D	NOK	NOK	NA	2.10.8	2.10_111227 (ISP 2.66)
SNV-5080R[17]	HD	3	D	NOK	NOK	NA	2.10.8	NA
SNV-5084[18]	HD	3	D	In: built-in mic	1 x I 1 x O	NA	XOa 3.0.5	1.13_131218
SNV-6084R[19]	HD	3	D	Audio in	1 x I 1 x O	NA	2.11.29	2.22_131218
SNV-7084[20]	HD 3 MP	3	D	Audio in	1 x I 1 x O	NA	XOa 3.0.5	1.00_140408
SNV-L6013R[21]	Full HD	3	D	Audio in	NA	NA	XO 4.0.7	1.00_160317
SPE-100 Video Encoder	SD	3	D	Audio in	1 x I 1 x O	Yes	2.10.8	NA
SPE-101 Video Encoder[22]	SD	3	D	NA	NA	NT	2.11.29	2.30_131230
SPE-400 Video Encoder	SD	3	D	Audio in	1 x I 1 x O	Yes	XOa 3.0.5	2.32_131230

[1] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[2] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[3] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[4] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[5] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[6] OSD and privacy mask only via web interface. Set audio to G.711 in camera web interface.

[7] Frame rate is limited to 20 fps.

[8] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[9] OSD and privacy mask only via web interface. Set audio to G.711 in camera web interface.

[10] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[11] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[12] Set audio to G.711 in camera web interface (otherwise NO VIDEO).

[13] OSD only via web interface. Set audio to G.711 and select the option 'Apply power to ext. mic' in camera web interface. No contrast setting.

[14] OSD only via web interface.

[15] Set audio to G.711 in camera web interface (otherwise NO VIDEO).

[16] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[17] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[18] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[19] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[20] Frame rate no longer limited to 8 fps with XO 4.0 and above.

[21] OSD and privacy mask only via web interface.

[22] Frame rate no longer limited to 8 fps with XO 4.0 and above.

Note:

- The I-frame distance varies from 0.5 second to 4 seconds, depending on the framerate. I-frame distances < 4 seconds can increase the bandwidth and disk usage.
- Maximum 8 fps for all Samsung cameras on highest resolution, except when indicated (see footnotes with specific camera type).
- Untested camera models: some features may not function; restricted to maximum 2 streams.

CHAPTER

16 SANYO

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
VCC-HD2500P	HD (1080p)	3	D	Audio in Ext. mic (NT)	2 x I 2 x O (NT)	NA	2.10.8	NA
VCC-HD3500P	HD	3	D	Audio in	1 x I 1 x O	NA	2.10.8	NA
VCC-HD4600P	HD	3	D	Audio in	1 x I 1 x O	NA	2.10.8	NA
VCC-HD5400P	HD	3	D	Audio in	1 x I 1 x O	Yes	2.10.8	NA
VCC-HD5600P	HD (1080p)	3	D	Audio in Ext. mic (NT)	4 x I 2 x O 8 x I 2 x O (NT)	Yes NT	2.10.8	NA

Note:

- Only double-chip cameras will be supported. These are the models 2500, 3500, 4600, 5400, and 5600.
- The one-chip models will not be supported: 2100, 2300, 3100, and 3300.
- Maximum usable resolution is 1280 x 720.
- Untested camera models: some features may not function; restricted to maximum 2 streams.

CHAPTER

17 SONY

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
SNC-CH110[1]	HD 720p	2	B	Audio in	NA	NA	2.10.8	1.78.00
SNC-CH120	HD 720p	2	B	Audio in	1 x I 1 x O	NA	2.10.8	NA
SNC-CH140	HD 720p	2	B	Audio in	1 x I 1 x O	NA	2.10.8	NA
SNC-CH160	HD 720p	2	B	In: audio in, ext. mic	1 x I 1 x O	NA	2.10.8	NA
SNC-CH180[2]	HD 720p	2	B	In: audio in, ext. mic	1 x I 2 x O	NA	2.10.8	NA
SNC-CH210	HD 1080p	2	B	NA	1 x I	NA	XOa 3.0.5	1.82.0.1
SNC-CH220[3]	HD 1080p	2	B	NA	1 x I 1 x O	NA	2.10.8	1.80.00
SNC-CH240	HD 1080p	2	B	In: audio in, ext. mic	1 x I 2 x O	NA	2.10.8	NA
SNC-CH260	HD 1080p	2	B	In: audio in, ext. mic	1 x I 2 x O	NA	2.10.8	NA
SNC-CH280	HD 1080p	2	B	In: audio in, ext. mic	1 x I 2 x O	NA	2.10.8	NA
SNC-DH110T	HD 720p	2	B	In: audio in, ext. mic (NT)	1 x I 2 x O (NT)	NA	2.10.8	1.78.00
SNC-DH120	HD 720p	2	B	NA	NA	NA	XOa 3.0.5	1.82.01
SNC-DH140	HD 720p	2	B	In: audio in, ext. mic (NT)	1 x I 2 x O (NT)	NA	2.10.8	NA
SNC-DH160	HD 720p	2	B	Audio in	1 x I 1 x O	Yes	2.10.8	NA
SNC-DH180	SD	2	B	Audio in	1 x I 1 x O	NA	2.10.8	NA
SNC-DH220T	HD 1080p	2	B	NA	1 x I 1 x O	NA	XOa 3.0.5	1.82.0.1

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
SNC-DH240	HD 1080p	2	B	In: audio in, ext. mic	1 x I 2 x O	NA	2.10.8	NA
SNC-DH260	HD 1080p	2	B	In: audio in, ext. mic	1 x I 2 x O	NA	2.10.8	NA
SNC-EB602R[4]	1280 x 1024	2	B	NA	NA	NOK	XOa 3.2.12	2.6.1
SNC-EB632R[5]	Full HD	2	B	NA	NA	Only focus	XO 4.2.8	2.6.1
SNC-EM600	HD 720p	2	B	NA	NA	NA	2.11.23	1.12.0
SNC-EM602R[6]	1280 x 1024	2	B	NA	NA	Yes	XO 4.2.8	NA
SNC-EM632R[7]	Full HD	2	B	NA	NA	Only focus	XOa 3.2.12	2.6.1
SNC-EP521[8]	SD	2	B	In: ext. mic[9]	2 x I 1 x O	OK	XOa 3.2.12	1.85.0
SNC-HM662 Dewarp	HD 5 MP	2	B	In: audio in, ext. mic	1 x I 1 x O	NA	XOa 3.0.10	1.2.0
SNC-RH124 SNC-RH164	HD	2	B	Audio in	1 x I 1 x O	Yes	2.10.8	NA
SNC-RS 44/46/N/P[10]	SD	2	B	In: audio in, ext. mic	4 x I 2 x O	Yes	2.10.8	NA
SNC-RS 84/86/N/P[11]	SD	2	B	In: audio in, ext. mic	4 x I 2 x O	Yes	2.10.8	NA
SNC-VB600B	HD 720p	2	B	NOK	NOK	NA	2.10.8	1.5.1
SNC-VB630	HD 1080p	2	B	NOK	NOK	NA	2.10.8	1.5.1
SNC-VM600B	HD 1080p	2	B	NOK	2 x I 2 x O	NA	XOa 3.0.5	2.2.1
SNC-WR600	HD 720p	2	B	NA	4 x I 2 x O	Yes	2.11.23	NA
SNC-XM631[12]	1920 x 1080	2	B	NA	NT	NA	XOa 3.2.33	–
SNC-XM632[13]	Full HD	2	B	In: built-in mic	NA	NA	XOa 3.2.12	2.5.0

[1] If 4:3 resolutions are required, make sure the camera is set accordingly; and likewise for 16:9 resolutions. The two streams must have the same aspect ratio.

[2] Resolution 1280 x 720 is not supported.

[3] If 4:3 resolutions are required, make sure the camera is set accordingly; and likewise for 16:9 resolutions. The two streams must have the same aspect ratio.

[4] This camera also works with the ONVIF driver. The Sony driver always uses CBR; the ONVIF driver uses VBR.

[5] This camera also works with the ONVIF driver. The Sony driver always uses CBR; the ONVIF driver uses VBR.

[6] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[7] This camera also works with the ONVIF driver. The Sony driver always uses CBR; the ONVIF driver uses VBR.

[8] Maximum 12 fps. OSD can display only 1 item at a time.

[9] Enable audio in web interface before connecting to ADPRO device. Audio may present some noise.

[10] N = NTSC; P = PAL.

[11] N = NTSC; P = PAL.

[12] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[13] This camera also works with the ONVIF driver. The Sony driver always uses CBR; the ONVIF driver uses VBR. When using the Sony driver, the bitrate displayed in the camera's web interface may not correspond with the real bitrate as set in the XO client.

Note:

- Support for on-board analytics (DEPA) for 5th and 6th generation camera models.
- Privacy masking has been disabled from firmware version V2.11.0012.
- Untested camera models: may result in default resolution selection (as Sony does not return the supported resolutions); restricted to maximum 2 streams.

The list above contains only the Sony cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar Sony cameras, using the exact same chipsets as the tested cameras but with different bodies, also function correctly. It concerns the following camera types:

Similar to SNC-EM600:

- SNC-EB600
- SNC-EM601
- SNC-EM602RC
- SNC-VB600 (with I/O: 2 x I, 2 x O)
- SNC-VM600 (with I/O: 2 x I, 2 x O)
- SNC-VM601 (with I/O: 2 x I, 2 x O)
- SNC-VM602R (with I/O: 2 x I, 2 x O)

Similar to SNC-EM632R:

- SNC-EB630
- SNC-EM630
- SNC-EM631
- SNC-EM632RC

Similar to SNC-HM662:

- SNC-CX600
- SNC-CX600W

Similar to SNC-XM632:

- SNC-XM636
- SNC-XM637

Similar to SNC-VB630:

- SNC-VB632D (with I/O: 2 x I, 2 x O)
- SNC-VM630 (with I/O: 2 x I, 2 x O)
- SNC-VM631 (with I/O: 2 x I, 2 x O)
- SNC-VM632R (with I/O: 2 x I, 2 x O)

Similar to SNC-WR600:

- SNC-WR602C (with I/O: 4 x I, 2 x O)
- SNC-WR630 (with I/O: 4 x I, 2 x O)
- SNC-WR632C (with I/O: 4 x I, 2 x O)

CHAPTER

18 GENERIC DRIVER URLS

Below, you find a list of known URLs that work with the generic IP camera driver. For more information on the generic driver, see Generic Driver for IP Camera (doc. no. 27197).

Note:

Honeywell welcomes your feedback on URLs not listed in this document that you may have used successfully with the generic driver. If possible, please provide details on brand, type, camera firmware version, I/O functionality, and used URLs.

Note:

H.265 on cameras using the generic driver is supported with XO 4.2 and above.

Arecont AV20365DN

4 possible streams, only 1 at a time, entered as url2 (**NO analytics**), 5 MP was not possible to stream.

```
rtsp://ip/
h264.sdp1?x0=0&x1=2560&y0=0&y1=1920&res=full&fps=5&bitrate=1024&
qp=25&ssn=20
rtsp://ip/
h264.sdp4?x0=0&x1=2560&y0=0&y1=1920&res=full&fps=5&bitrate=1024&
qp=25&ssn=25
rtsp://ip/
h264.sdp2?x0=0&x1=2560&y0=0&y1=1920&res=full&fps=5&bitrate=1024&
qp=25&ssn=30
rtsp://ip/
h264.sdp3?x0=0&x1=2560&y0=0&y1=1920&res=full&fps=5&bitrate=1024&
qp=25&ssn=35
```

Axis 7001 encoder

Only 1 stream possible, entered as url2 (**NO analytics**):

```
rtsp://ip:554/axis-media/
media.amp?videocodec=h264&compression=50&fps=15&videokey
frameinterval=60&resolution=4CIF&audio=0
```

Axis M7016 encoder

16-channel encoder with 4 IP addresses (4 channels per IP address). Per channel: 2 possible streams, entered as url1 and url2; do not use url3 with this encoder. URLs below are for camera 1. Replace 'camera=1' in URLs below by 'camera=2', 'camera=3', 'camera=4' for the other cameras.

url1 (analytics):

```
rtsp://ip:554/axis-media/
media.amp?camera=1&videocodec=h264&compression=50&fps=5
&videokeyframeinteval=20&resolution=CIF&audio=0
```

url2 (event recording):

```
rtsp://ip:554/axis-media/
media.amp?camera=1&videocodec=h264&compression=50&fps=15
&videokeyframeinteval=60&resolution=4CIF&audio=0
```

For ulr1, the analytics stream, framerate (fps) must be = 5, I-frame interval (videokeyframeinterval) = 20 (framerate x 4), and resolution = CIF.

For url2, you can set fps up to 30; then set videokeyframeinterval to 4 x fps. Possible resolutions for url2: CIF, 2CIF, 4CIF, D1. Compression: 0–100.

Axis Q6000-E

Has 4 cameras on board, requires 4 IP channels. 360° panoramic view is not supported for this camera. URLs below are for camera 1. Replace 'camera=1' in URLs below by 'camera=2', 'camera=3', 'camera=4' for the other cameras.

url1 (analytics):

```
rtsp://ip_address/axis-media/
media.amp?camera=1&resolution=480x270&fps=5&videokeyframeinterva
l=19&datetime=yes
```

url2 (event recording):

```
rtsp://ip-address/axis-media/
media.amp?camera=1&resolution=1280x720&fps=25&videokeyframeinter
val=99&datetime=yes
```

'datetime=yes' in the URL is required for OSD.

After making changes in the camera web interface, disable/enable the camera in the XO client to apply the changes.

Live view resolution options (on right-click): 480 x 270, 1280 x 720, hard disk stream. Choosing 480 x 270 gives 1280 x 270.

Requires 60 W midspan/power injector.

CCTI 316B-01 (thermal)

url1 (analytics):

```
rtsp://admin:12345@ip/h264/ch01/sub/av_stream
```

url2 (recording):

```
rtsp://admin:12345@ip/h264/ch01/main/av_stream
```

Concept Pro CBP6324DN-IP4M

url1 (hi-res/event recording, 2688 x 1512, 15 fps, GOP = 45, 280 kB/s):

`rtsp://ip_address/snl/live1/1`

url2: (analytics stream, CIF, 5 fps, GOP = 20, 6 kB/s):

`rtsp://ip_address/snl/live1/2`

OSD and privacy mask only available via web interface. Can take up to 5 minutes to restore connection after interruption.

Concept Pro CVP9328DNIR-IP

2 streams:

url1 (hi-res/event recording, 1920 x 1080, 25 fps, GOP = 75, VBR 2000, 270 kB/s):

`rtsp://ip_address/snl/live1/1`

url2 (analytics, CIF, 5 fps, GOP = 20, 6 kB/s):

`rtsp://ip_address/snl/live1/2`

OSD and privacy mask only available via web interface. Can take up to 8 minutes to restore connection after interruption.

Dahua DHI-HCVR5104HE-S2

For security reasons, use a firmware version above 3.200.0001.17, Build Date: 17-03-2015.

Channel number and stream numbers are indicated in bold in the URLs below.

Encoder channel 1:

url1:

```
rtsp://ip_address/cam/
realmonitor?channel=1&subtype=1&unicast=true&proto=Onvif
```

url2:

```
rtsp://ip_address/cam/
realmonitor?channel=1&subtype=0&unicast=true&proto=Onvif
```

Encoder channel 2:

url1:

```
rtsp://ip_address/cam/
realmonitor?channel=2&subtype=1&unicast=true&proto=Onvif
```

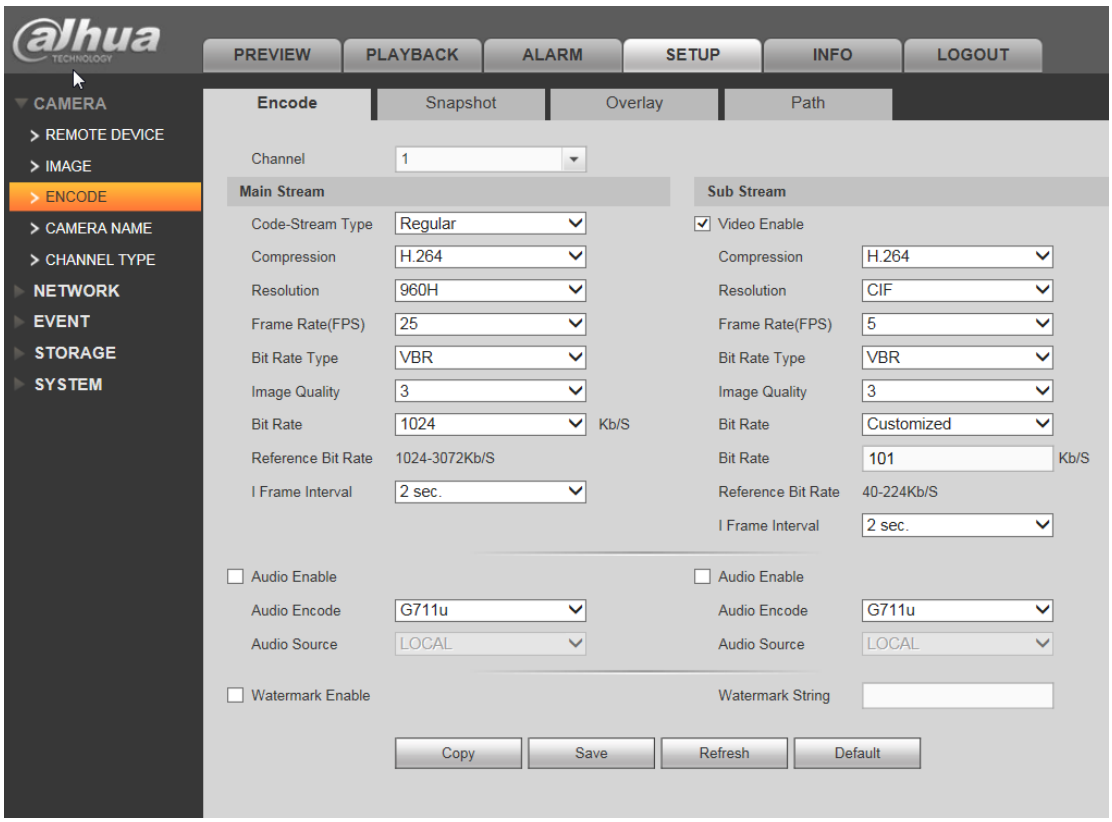
url2:

```
rtsp://ip_address/cam/
realmonitor?channel=2&subtype=0&unicast=true&proto=Onvif
```

Refer to the screenshot below to set up the encoder correctly.

Note:

The encoder only supports an I-frame distance of max. 2 seconds. This is within the XO working range, but ideally it should be 4 seconds.



Dvtel C-5322-30-16F (thermal)

1 stream only (320 x 240)!

`rtsp://ip:554/2?videoCodecType=H.264`

DRS Watchmaster IP Elite 3000 (thermal)

1 stream only!

`rtsp://ip:554/2?videoCodecType=H.264`

FLIR FC 324-S

1 URL for both analytics and event recording. Default username: ‘admin’, default password: ‘fliradmin’

`rtsp://192.168.10.78:554/ch0`

Minimum required camera firmware: BU1.2.

Define ‘ch0’ in the camera, in the same menu as the image size, but with label ‘Stream Name’.

Set ‘IDR Factor’ to 1 in the camera, in the same menu as the image size, but with label ‘IDR Factor’.

To get clear targets without saturation, set the thermal image settings as follows:

- ROI Full
- Use always Plateau Algorithm: recommended value 175

- ITT: 117
- AGC – Gain: between 4 and 7
- DDE: between 19 and 24.

For Flir FC Series cameras, set up the compression engines as follows:

- Frame rate 5 fps
- I-frame distance 20
- Bitrate: variable (not CBR); around 1 Mbps for good image reconstruction.

For camera firmware v1.32, also apply the following rules:

- use UDP communications when using RTSP connection stream
- set the quality to “HIGH” in all the streams in use
- disable the internal camera analytics.

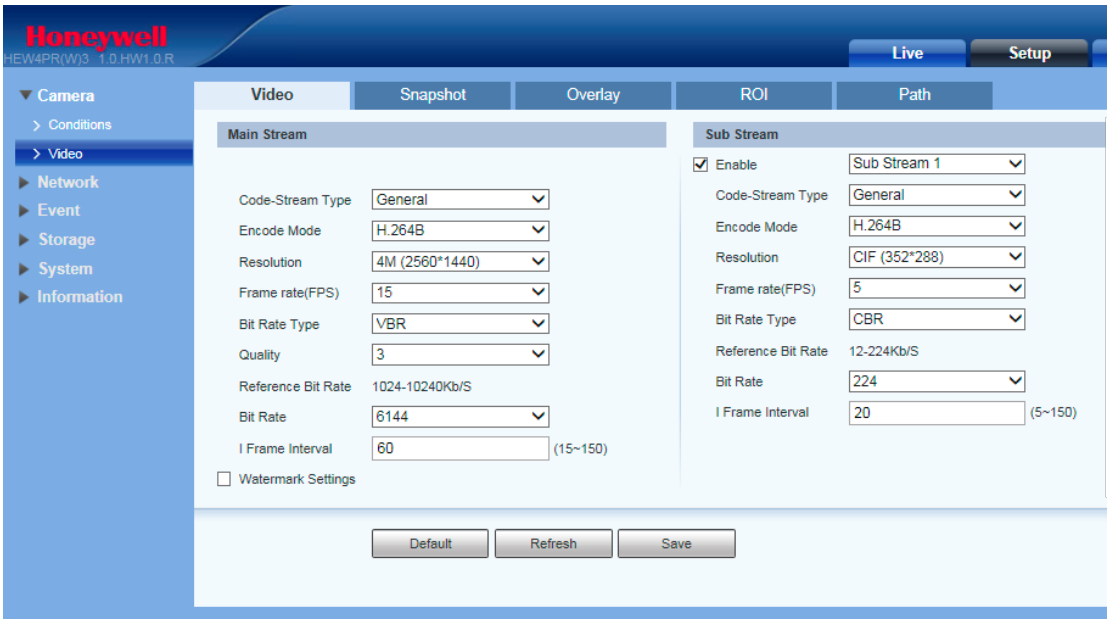
Note:

FLIR FC series S may be replaced by FLIR FC series O or FLIR FC series ID.

Honeywell HEW4PR3/HEW4PRW3

4 MP dome camera, with camera firmware version: 1.000.HW01.0.R build: 2016-11-14

Set up the camera streams in the web GUI before enabling in the XO client. See the screenshot below for the correct settings (example below is for 4 MP recording + analytics):



url1 (analytics):

```
rtsp://ip:554/cam/
realmonitor?channel=1&subtype=1&unicast=true&proto=Onvif
```

url2 (event/continuous recording):

```
rtsp://ip:554/cam/
realmonitor?channel=1&subtype=0&unicast=true&proto=Onvif
```

Honeywell HVE4X

4-channel video encoder; 4CIF resolution. Requires encoder firmware version V1.1.0 Build 151214. Set up the streams in the web GUI before enabling in the XO client.

Choose **Remote Configuration** > **Camera Settings** > **Video Settings**.

Setting	Main Stream	Sub stream
Video type	Video stream	Video stream
Resolution	704x576	352x288
Bitrate type	variable	variable
Video quality	medium	medium
Frame rate	6	6
Max. bitrate	84	84
I-frame interval	24	24
Video encoding	H.264	H.264

Note:

use the copy feature to replicate settings on all 4 channels

For channel 1:

```
url1: rtsp://ip:554/Streaming/channels/102
url2: rtsp://ip:554/Streaming/channels/101
```

For channel 2:

```
url1: rtsp://ip:554/Streaming/channels/202
url2: rtsp://ip:554/Streaming/channels/201
```

For channel 3:

```
url1: rtsp://ip:554/Streaming/channels/302
url2: rtsp://ip:554/Streaming/channels/301
```

For channel 4:

```
url1: rtsp://ip:554/Streaming/channels/402
url2: rtsp://ip:554/Streaming/channels/401
```

LG LNP3020T

This is a PTZ camera, only streaming possible.

```
url1 (low res): rtsp://ip:554/Slave-0
url2 (high res): rtsp://ip:554/Master-0
```

Now also supported with ONVIF driver.

Norbain / Vista VK2

```
url1: rtsp://a.b.c.d:554/1/stream1
url2: rtsp://a.b.c.d:554/1/stream3
```

This camera has a 2-second interval for I-frames, hence a high bitrate.

Now also supported with ONVIF driver.

Ronix IP Camera

Default login name: 'root', password: 'root'

```
url1 –rtsp://ip/cam0_1
url2 –rtsp://ip/cam0_0
```

For additional setup instructions, see Appendix A: Ronix IP Camera Setup on page 68.

Santec SNC-8322HO

4 possible streams, but lowest frame rate is 13 fps, so not usable for analytics.

Default login name: 'admin', default password: '9999'

```
rtsp://ip:554/h264
rtsp://ip:554/h264_2
rtsp://ip:554/h264_3
rtsp://ip:554/h264_4
```

Now also supported with ONVIF driver.

Visicom 3S Vision DNMP6031IR

Default login name: 'root', password: 'root'

```
url1 (low res, analytics): rtsp://ip:554/cam1/h264-1
url2 (high res, recording): rtsp://ip:554/cam1/h264
```

Visicom 3S Vision NWS-4071 encoder (4-channel)

Default login name: 'root', password: 'root'

```
url1 (low res, analytics): rtsp://ip:554/cam1/h264-1
url2 (high res, recording): rtsp://ip:554/cam1/h264
```

These URLs are for channel 1; for the other channels, replace cam1 by cam2, cam3, or cam4.

CHAPTER

19 ONVIF DRIVER

Use the ONVIF driver to connect your ONVIF Profile S/Profile T compliant IP camera.

Note:

ONVIF Profile T with H.265 decoding is supported with firmware version XO 4.3 and above.

This chapter lists cameras that work with the ONVIF Profile S/Profile T driver with ADPRO firmware version XO 4, and that Honeywell has tested and approved according to its own protocols.

Any other ONVIF Profile S/Profile T compliant camera may also work with ADPRO firmware version XO 4. However, if the camera is not in this list, Honeywell does not guarantee that the camera will (fully) function with your ADPRO device. Honeywell strongly recommends that you always test such a camera and all its required functionality.

Note:

Honeywell welcomes your feedback on cameras not listed in this document that you may have used successfully with the ONVIF driver. If possible, please provide details on brand, type, camera firmware version, I/O functionality, or any extra information.

American Dynamics/Tyco

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
Illustra 600 ADCi600-D321[1]	SD	2	B	In: ext. mic	1 x O	NA	XOa 3.2.12	AD00-00-17-20
Illustra 610 ACDi610-D011[2]	Full HD	2	B	In: ext. mic	1 x O	NA	XOa 3.2.17	AD00-00-17-20
Illustra Pro 3MP Mini-Dome indoor[3]	3 MP	2	B	In: ext. mic	NOK	Zoom, focus[4]	XOa 3.2.17	1.1.1.C11078AD9
Illustra Pro PTZ outdoor[5]	Full HD	2	B	NOK	NOK	Yes[6]	XOa 3.2.17	2.0.0.A10475ZZZ395

[1] Set the GOV size for both streams.

[2] OSD and privacy mask only via web interface.

[3] OSD, privacy mask, and brightness/contrast/saturation only via web interface.

[4] Zoom and focus only via web interface.

[5] OSD, privacy mask, and brightness/contrast/saturation only via web interface.

[6] Focus and iris only via web interface.

Note:

Before activating the camera in the XO client, use the camera's web interface to:

- Set the second stream to H264.
- Enable audio in (audio recording).

Avigilon

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
1.0-H3-B2	HD 1 MP	2	B	In: ext. mic	1 x O	NA	XOa 3.2.12	2.6.0.90

Note:

This camera also works with the Avigilon driver, but then I/O is not supported.

BCS

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
BCS-DMIP3201AIR-IV[1]	Full HD	2	B	In: ext. mic Audio out	1 x I 1 x O	NA	XO 4.3.6	2.460.0000.14.R, build: 2017-07-20
BCS-P-212RWSA-G[2]	Full HD	2	B	In: ext. mic	1 x I 1 x O	NA	XO 4.3.6	IPC_G6101-B5010P30D1607C30
BCS-P-214RWSA-G[3]	2560x1440	2	B	In:ext. mic	1 x I 1 x O	NA	XO 4.3.6	IPC_G6102-B5016P10D1705C06
BCS-P-262R3WSA[4]	Full HD	2	B	In: ext mic	1 x I 1 x O	NA	XO 4.3.6	IPC_Q1201-B5020P11D1705C06
BCS-P-262R3WSM	Full HD	2	B	In: built-in mic	NA	NA	XO 4.3.6	IPC_G6103-B0006P10D1705C06
BCS-P-264R3WSA[5]	4 MP	2	B	In: ext. mic	1 x I 1 x O	NA	XO 4.3.6	IPC_Q1201-B5020P11D1705C06
BCS-P-264R3WSM	4 MP	2	B	In: built-in mic	NA	NA	XO 4.3.6	IPC_G6102-B5016P10D1705C06
BCS-P-414RW	4 MP	2	B	NA	NA	NA	XO 4.3.6	IPC_G6102-B5016P10D1705C06
BCS-P-444RSA[6]	4 MP	2	B	In: ext. mic	1 x I 1 x O	NA	XO 4.3.6	IPC_Q1201-B5020P11D1705C06
BCS-P-462RWSA-G[7]	Full HD	2	B	In: ext. mic	1 x I 1 x O	NA	XO 4.3.6	IPC_Q1201-B5020P11D1705C06
BCS-P-464RWSA-G[8]	4 MP	2	B	In: ext. mic	1 x I 1 x O	NA	XO 4.3.6	IPC_Q1201-B5020P11D1705C06
BCS-P-4121R	Full HD	2	B	NA	NA	NA	XO 4.3.6	IPC_G6101-B5010P30D1607C30
BCS-P-4421RSA[9]	Full HD	2	B	In: ext. mic	1 x I 1 x O	NA	XO 4.3.6	IPC_E5101-B5012P07D1603C10
BCS-TIP5201IR-V-IV[10]	Full HD	2	B	NA	NA	NA	XO 4.3.6	2.460.0000.14.R, build: 2017-07-20
BCS-TIP8201AIR-IV[11]	Full HD	2	B	In: ext. mic Audio out	2 x I 1 x O	NA	XO 4.3.6	2.460.0000.14.R, build: 2017-07-20
BCS-TIP8801AIR-IV[12]	3840x2160	2	B	In: ext. mic Audio out	2 x I 1 x O	NA	XO 4.3.6	2.460.0000.14.R, build: 2017-07-20

[1] ADPRO XO Client shows 512x288 as CIF resolution. Quads are 352x288. Set the Audio Sampling Frequency to 8000 in the camera web interface.

[2] ADPRO XO supports only one audio in channel. Enable the desired channel in the camera web interface (Video and Audio > Audio > Audio input). Enable inputs in the camera web interface (Events > Common Alarm > Alarm Input: set to enable; and select Enable plan).

[3] Enable inputs in the camera web interface (Events > Common Alarm > Alarm Input: set to enable; and select Enable plan).

[4] Enable inputs in the camera web interface (Events > Common Alarm > Alarm Input: set to enable; and select Enable plan).

[5] Enable inputs in the camera web interface (Events > Common Alarm > Alarm Input: set to enable; and

select Enable plan).

[6] Enable inputs in the camera web interface (Events > Common Alarm > Alarm Input: set to enable; and select Enable plan).

[7] Enable inputs in the camera web interface (Events > Common Alarm > Alarm Input: set to enable; and select Enable plan).

[8] Enable inputs in the camera web interface (Events > Common Alarm > Alarm Input: set to enable; and select Enable plan).

[9] Enable inputs in the camera web interface (Events > Common Alarm > Alarm Input: set to enable; and select Enable plan).

[10] ADPRO XO Client shows 512x288 as CIF resolution. Quads are 352x288.

[11] ADPRO XO Client shows 512x288 as CIF resolution. Quads are 352x288. Set the Audio Sampling Frequency to 8000 in the camera web interface.

[12] ADPRO XO Client shows 512x288 as CIF resolution. Quads are 352x288. Set the Audio Sampling Frequency to 8000 in the camera web interface.

Note:

- OSD and privacy mask only via web interface.
- For BCS-DMIP3201AIR-IV, BCS-P-212RWSA-G, BCS-P-214RWSA-G, BCS-P-262R3WSA, BCS-P-262R3WSM, BCS-P-264R3WSA, BCS-P-264R3WSM, BCS-P-414RW, BCS-P-444RSA, BCS-P-462RWSA-G, BCS-P-464RWSA-G, BCS-P-4121R, BCS-P-4421RSA, BCS-TIP5201IR-V-IV, BCS-TIP8201AIR-IV, and BCS-TIP8801AIR-IV (depending on selected resolutions):

Analytics image has a 4:3 aspect ratio, but has a 16:9 image squeezed into it. This distorts the horizontal dimensions in the calibration for analytics applications such as IntrusionTrace; it makes detection unreliable. Make sure to perform bounding box calibration for this camera.

The list above contains only the BCS cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar BCS cameras, using the same firmware, also function correctly. It concerns the following camera types:

- Similar to BCS-DMIP3201AIR-IV:
  - BCS-DMIP2201AIR-IV
  - BCS-DMIP5601AIR-IV
  - BCS-DMIP5801AIR-IV
  - BCS-TIP8601AIR-IV.
- Similar to BCS-TIP5201IR-V-IV:
  - BCS-DMIP3201IR-V-IV

Canon

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
VB-H43	2 MP	2	B	In: ext. mic	2 x I 2 x O	Yes	XOa 3.2.17	1.2.0
VB-R11	1280 x 720	2	B	In: ext. mic	2 x I 2 x O	Yes[1]	XOa 3.2.33	1.03
VB-S30D[2]	1920 x 1080	2	B	In: ext. mic	1 x I 1 x O	Yes[3]	XOa 3.2.33	1.3.0

[1] Not possible to set home position via preset 0 in XO client; home position must be set in camera.

[2] Maximum frame rate is 15 fps/stream when using 2 streams; 30 fps possible for 1 stream.

[3] Not possible to set home position via preset 0 in XO client; home position must be set in camera.

Note:

- Perform the following settings in the camera web interface:
  - Enable second stream as follows:
  - Choose **Video**. Set the option **H.264(2)** to **Enable**.
  - For VB-H43:
  - Choose **Setting Page** > **Server**. Under **WS-Security**, set the option **Check Time on Authentication** to **Do not check**.
  - For I/O to work: in the camera web interface, enable the option **Events – External Device Input Event**.
  - For VB-R11/VB-S30D (better video quality when motion): Select the option **Do not use bit rate control**.
- Brightness/contrast/saturation not working.
- OSD only via web interface.
- The list above contains only the Canon cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar Canon cameras, using the same firmware, also function correctly.

Concept Pro

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
AIR2024-IP4M-Z[1]	4 MP	2	B	Audio in	NA	NA	XO 4.1	v3.0.0804.1002.66.4.58.2.4
AIR4526-IP	1920 x 1080	2	B	NOK	NA	NA	XOa 3.2.33	v2.0.0801.1002.66.2.62.2.3
CVP9314DNIR-IP4M-Z[2]	4 MP	2	B	In: built-in or ext. mic	NA	NA	XO 4.1	v3.3.0804.1003.66.4.73.8.4
CVP9324DNIR-IP	Full HD	2	B	NOK	NOK	NA	XOa 3.2.17	v2.0.0801.1002.66.1.62.2.3
CVP9328DNIR-IP[3]	2 MP	2	B	In: ext. mic	NA	NA	XO 4.1	v3.3.0804.1002.66.5.73.0.4
VHSDIR-670EXT-IP[4]	1920 x 1080	2	B	NOK	I: NOK 2 x O	Yes, focus and iris NOK	XOa 3.2.33	v2.0.0701.1002.66.1.114.1.4
VHSDIR-870EXT-IP[5]	1920 x 1080	2	B	NOK	I: NOK 2 x O	Yes	XOa 3.2.33	v2.0.0601.1002.66.1.62.2.3

[1] Frame rate is limited to 15 fps at higher resolutions. For audio in: enable microphone in web interface (Device > Microphone – G711 ulaw)).

[2] Frame rate is limited to 15 fps at higher resolutions. For audio in: enable microphone in web interface (Device > Microphone – G711 ulaw)).

[3] Frame rate is limited to 15 fps at higher resolutions. For audio in: enable microphone in web interface (Device > Microphone – G711 ulaw)). Brightness not working.

[4] Brightness/contrast/saturation not OK. PTZ preset positions working except position 0.

[5] Contrast not OK. PTZ preset positions working except position 0.

Note:

Max. 18 fps.

OSD and privacy mask only via web interface.

The list above contains only the Concept Pro cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar Concept Pro cameras, using the same firmware, also function correctly. It concerns the following camera types:

- AIR2024-IP4M/12
- AIR2024-IP4M/2.8
- AIR2024-IP4M/6
- AIR3526-IP4M
- AIR3526-IP4M-Z
- AIR4528-IP4M

- AIR4528-IP4M-Z
- AIR8012-IP3M-Z
- CBP6324DN-IP4M
- CBP6324DNIR-IP4M
- CBP6324DNIR-IP4M
- CVP9314DNIR-IP4M
- CVP9324DN-IP4M
- CVP9324DNIR-IP4M
- CVP9324DNIR-IP4M-G
- CVP9324DNIR-IP4M-Z
- CVP9328DNIR-IP4M
- CVP9328DNIR-IP4M-G2
- CVP9328DNIR-IPG2
- VIPC-MD4MPB

Dahua

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
DH-SD49225T-HN[1]	1920x 1080	2	B	In: ext. mic. Audio out	2 x I 1 x O	Yes	XO 4.2.10	2.600.0000.2.R, build: 2017-09-05
DH-SD59225U-HNI[2]	–	2	B	–	Yes	–	XO 4.2.8	2.422.0000.8.R.E4.2512.3S.NR, build: 2017-03-15
DH-SD6AW230-HNI[3]	Full HD	2	B	NOK	2 x O	Yes, iris NOK	XOa 3.2.17	2.420.0001.0.R.3011.3N.NR, build 2015-02-10
IPC-EBW81200[4] Fisheye	4000x 3000	2	B	In: built-in or ext. mic	I NOK 1 x O	NA	XOa 3.2.33	2.400.0000.8.R, build 2016-03-10
IPC-HDBW2300R-Z	3 MP	2	B	NA	NA	Zoom	XOa 3.2.12	Software: 2.420.0009.0.R, build 2015-11-06 Web version: 3.2.1.305503 ONVIF version: 2.4.1
IPC-HDBW4220E[5]	Full HD	2	B	NA	NA	NA	XOa 3.2.17	2.400.Dahua 00.6.R, build: 2015-04-09
IPC-HDBW5221E-Z	Full HD	2	B	NA	1 x I 1 x O	Zoom	XOa 3.2.17	2.400.Dahua 00.10.R, build 2015-06-18
IPC-HDBW5421E-Z	4 MP – 2 K	2	B	NOK	1 x I 1 x O	Zoom	XOa 3.2.17	2.400.Dahua 00.10.R, build 2015-06-18
IPC-HDW1000S[6]	720p	2	B	NA	NA	NA	XOa 3.2.12	Software: 2.420.000.0.R, build 2014-09-24 Web version: 3.2.4.213946
IPC-HFW2300R-Z[7]	3 MP	2	B	NA	NA	Zoom & autofocus	XOa 3.2.12	Software: 2.420.0009.0.R, build 2015-11-06 Web version: 3.2.1.305503 ONVIF version: 2.4.1
IPC-HFW4220E[8]	Full HD	2	B	NA	NA	NA	XOa 3.2.17	2.400.Dahua 00.15.R, build 2015-08-30
IPC-HFW5221E-Z	Full HD	2	B	NOK	2 x I 1 x O	Zoom & manual focus	XOa 3.2.17	2.400.Dahua 00.15.R, build 2015-08-30
IPC-HFW5421E-Z	4 MP – 2 K	2	B	NOK	2 x I 1 x O	Zoom & manual focus	XOa 3.2.17	2.400.Dahua 00.15.R, build: 2015-08-30
SD59230S-HN[9]	Full HD	2	B	NA	I: NOK 1 x O	Yes, iris NOK	XOa 3.2.12	2.210.0004.0.R.A. 3013.3N.NR, build 2015-02-13 Web version: 3.2.1.253936 PTZ version: 2.02.81.RHNTEJ

[1] Max 20 fps at highest resolution. Analytics resolution is set to 352 x 288 but is displayed at 512 x 288. Quad pictures are 352 x 288. By default, the camera already makes use of the relay output. Make sure to disable all features in the web interface for proper functionality (menu Events). OSD and privacy mask only via web interface.

[2] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[3] OSD only via web interface. No brightness, contrast, saturation.

[4] Resolutions 2880 x 2880 and 4000 x 3000 are not supported by XO client. Current max. 6400 x 2752. Camera web interface password can be different from ONVIF password. Use admin/admin for ONVIF. Set main stream and sub-stream using web interface. Web interface reports 352 x 288 instead of 384 x 288 as indicated by XO client. Set audio sampling frequency to 8k for correct audio. OSD and privacy mask only via web interface.

[5] OSD and privacy mask only via web interface.

[6] Disable in-camera motion detection (otherwise NO VIDEO).

[7] This camera model has not officially been tested by Honeywell, but was implemented in a specific project.

[8] Max. 20 fps at highest resolution.

[9] OSD and privacy mask only via web interface.

Note:

- All models except IPC-EBW81200: disable audio (otherwise NO VIDEO).
- The following Dahua camera models have not officially been tested by Honeywell, but were implemented in a specific project: N45CB5Z; N45BB5Z, and N44CG52.
- The list above contains only the Dahua cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar Dahua cameras, using the same firmware, also function correctly. It concerns the following camera types:

Same firmware as IPC-HDW1000S:

- IPC-HFW1000S
- IPC-HFW1100
- IPC-HD1000C

Same firmware as SD59230S-HN:

- DH-SD6C220S-HN
- DH-SD6C230S-HN
- DH-SD59212S-HN
- DH-SD59220S-HN
- DH-SD59230S-HN
- DH-SD63220S-HN
- DH-SD63230S-HN
- DH-SD50220S-HN
- DH-SD50230S-HN
- DH-SD40212S-HN
- DH-SD42212S-HN

- DH-SD42C212S-HN
- DH-SD32203S-HN
- DH-SDZ2020S-N
- DH-SDZ2030S-N
- DH-SDZH2030S-N
- DH-SDZW2030S-N

Eneo

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
IED-62F0036P0A[1]	1920 x 1080	2	B	NA	NA	NA	XO 4.1	R1.03
IED-63M2812P0A[2]	3 MP	2	B	In: ext. mic Audio out	1 x O	Yes	XO 4.1	1.8.2-XE_release
IPB-73M2812M0A[3]	3 MP	2	B	In: ext. mic Audio out	1 x O	Yes, focus NOK	XO 4.1	R1.02
NXB-980IR37M	HD 2 MP	2	B	NA	NA	NA	XOa 3.2.12	1.4.8-T8_release
NXD-2012PTZ1080 B[4]	1080 p	2	B	In: ext. mic	1 x O	Yes	XO 4.1	1.4.2-X2_release
PXB-1080Z03IR	HD 2 MP	2	B	NA	NA	Zoom	XOa 3.0.5	4.25-155-ds
PXD-5360F01IR Dewarp	HD 5 MP	2	B	In: built-in mic	1 x I 1 x O	NA	XOa 3.0.5	NA
PXD-5362F01IR Dewarp	HD 5 MP	2	B	In: built-in mic	1 x I 1 x O	NA	XOa 3.0.5	NA

[1] OSD and privacy mask only via web interface.

[2] No autofocus (use web interface 'smart focus'). Enable I/O in web interface. OSD and privacy mask only via web interface.

[3] OSD and privacy mask only via web interface.

[4] Frame rate is limited to 12 fps. No manual focus. OSD and privacy mask only via web interface.

Note:

The list above contains only the Eneo cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar Eneo cameras, using the same firmware, also function correctly. It concerns the following camera types:2/3/5 MP box / bullet / dome cameras:

- IEB-62F0036M0A
- IEB-62V2812M0A
- IEB-63F0037M0A
- IEB-63M2812M0A
- IED-62F0036M0A
- IED-62V2812M0A
- IED-62V2812P0A
- IED-63F0037P0A
- IED-63M2812M0A
- IED-63MF2812P0A
- IPB-62M2812M0A
- IPB-72A0003M0A
- IPB-72A0010M0A
- IPB-75M3610M0A
- IPC-52A0003M0A
- IPC-53M2812M0A
- IPC-55C0000M0A
- IPD-62M2812P0A
- IPD-72A0003M0A
- IPD-73M2812M0A
- IPD-75M3610M0A
- PXB-1080Z03
- PXB-2080MIR B
- PXB-2080Z03
- PXB-2180Z03
- PXC-2080CS
- PXC-2080Z03
- PXD-2080MIR C
- PXD-2080Z03

Board cameras:

- NXP-880F26

Thermal cameras:

- PTB-1025F09
- PTB-1125F09
- PTB-1125F13
- PTB-1125F19
- PTB-1125F35

PTZ cameras:

- IPP-62A0012M0A
- IPP-72A0030M0A
- IPP-82A0030MIA
- IPP-82A0030MHA
- NXD-2030PTZ1080

Entry cameras:

- NXB-980IR3516M
- NXD-980IR3516P
- NXD-980IR3516M
- NXD-980IR37M
- NXD-980IR37P

Flir

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
FC-644-O	720 x 576	2	B	NA	1 x O	NA	XO 4.02.0013	TX V2.03.P06
DH-390 2MP	2 MP	2	B	NA	1 x O	NA	XO 04.05.0007	v1.0.3.p11
FB-349 ID	Thermal	1	A	NA	1 x O	NA	XO 04.05.0007	v1.3.2.4

Note:

The FLIR cameras (listed in the table above) are tested and approved by Honeywell. It is possible (but not guaranteed) that similar FLIR cameras, with similar design and same firmware, also function correctly.

Cameras with similar design:

- FB-324 ID
- FB-393 ID
- FB-349-O
- FB-324-O
- FB-393-O

Cameras with same firmware:

- FB-309-ID
- FB-312-ID
- FB-618-ID
- FB-632-ID
- FB-650-ID
- FB-695-ID
- FB-309-O
- FB-312-O
- FB-618-O
- FB-632-O
- FB-650-O
- FB-695-O

Note:

- Camera only delivers 15 fps.
- No contrast or saturation.
- No privacy mask.
- OSD only via web interface.

Genie CCTV

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
WIP13BV	1.3 MP	2	B	In: NOK Out: NA	I: NOK 1 x O	NA	XOa 3.2.17	3.4.2
WIP3BVAF	3 MP	2	B	In: NOK Out: NA	I: NOK 1 x O	Zoom & focus only in web interface	XOa 3.2.17	3.4.2.1

Note:

- Analytics @ 7 fps.
- Changing event recording resolution and frame rate in XO client may cause temporary NO VIDEO messages. Camera recovers automatically after a few minutes.
- OSD and privacy mask only via web interface.

Geovision

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
GV-BL2511[1]	Full HD	2	B	In: ext. mic	NOK	Zoom & focus	XOa 3.2.12	3.03
GV-MFD1501-1F	Full HD	2	B	In: built-in mic	NOK	NA	XOa 3.2.12	3

[1] Saving zoom presets is not possible.

When using external microphone, enable audio in the camera's web interface.

Note:

The list above contains only the Geovision cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar Geovision cameras, using the same firmware, also function correctly. It concerns the following camera types:

- GV-BL120D / 130D / 220D / 320D / GV-BL1200 / 1300 / 1500 / 2400 / 2500 / 3400 / 1210 / 2410 /3410 / 5310 / 2510-E / 5310-E
- GV-BX1300 Series / 1500 Series / 2400 Series / 2500 Series / 3400 Series / 5300 Series
- GV-BX1500-E / 2400-E / 3400-E / 5300-E / 2510-E / 5310-E
- GV-CA120 / 220 and GV-CAW120 / 220
- GV-FD120D / 220D / 320D / 1200 / 1500 / 2400 / 2500 / 3400 / 5300 / 1210 / 1510 / 2410 / 2510 / 3410
- GV-FE420 / 421 / 520 / 521 / 2301 / 4301 / 2302 / 3402 / 3403 / 5302 / 5303
- GV-FER3402 / 3403 / 521 / 5302 / 5303
- GV-MDR120 / 220 / 320 / 520 / 1500 Series / 3400 Series / 5300 Series
- GV-MFD120 / 130 / 220 / 320 / 520 / 1501 Series / 2401 Series / 2501 Series / 3401 Series / 5301 Series
- GV-PT130D / 220D / 320D
- GV-UBL1211 / 2411 / 3411 / 1301 Series / 2401 Series / 3401 Series

- GV-UBX1301 Series / 2301 Series / 3301 Series
- GV-VD120D / 121D / 122D / 123D / 220D / 221D / 222D / 223D / 320D / 321D / 322D / 323D
- GV-VD1500 / 2400 / 2500 / 3400 / 1530 / 2430 / 2530 / 3430 / 1540 / 2440 / 2540 / 3440 / 5340 / 2540-E / 5340-E

Grundig

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
GCI-K1577TH[1]	Full HD	2	B	In: ext. mic	NOK	NA	XOa 3.2.33	gr20160909NSX
GCI-K1627D[2]	HD 2 MP	2	B	In: ext. mic	NOK	NA	XOa 3.2.12	gr20150706NSX
GCI-K1677D[3]	Full HD	2	B	NA	NOK	NA	XOa 3.2.33	gr20160909NSX
GCI-K1779P	HD 2 MP	2	B	In: ext. mic	2 x O	OK	XOa 3.0.10	gr20140124NSA
GCI-M0566F[4]	3072 x 2048	2	B	In: built-in mic	1 x O	Zoom[5]	XO 3.2.33	gr20150210NSZ

[1] OSD and privacy mask only via web interface.

[2] At a resolution of 1920 x 1080, only one stream can provide 25 fps. A second 1920 x 1080 stream will only achieve 13 fps.

[3] OSD and privacy mask only via web interface.

[4] OSD and privacy mask only via web interface. Highest resolution only via web interface. Analytics resolution is 640 x 480 if stream 1 uses highest resolution (shows 720 x 480 in Info bar). Use “Back End Software Dewarping" as fisheye setting in the camera.

[5] Zoom works in de-warped mode, but the zoom– button zooms in. Zoom using mouse works well.

IC Realtime

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
IC-i2t-Px20W-AIOY[1]	1920 x 1080	2	B	NOK	7 x I 2 x O	Yes	XOa 3.2.33	2.400.General 00.3.R, build: 2014-07-30
ZENON-1s-PO2-IXO-x20	1920 x 1080	2	B	NOK	2 x I 1 x O	Yes	XOa 3.2.33	2.210.General 04.0.R, build: 2015-02-13

[1] Privacy mask not available.

Note:

- Frame rate is limited to 25 fps.
- Contrast not working.
- Iris not working.

- OSD and privacy mask only via web interface.

IndigoVision

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
BX520-HD	1920 x 1080	2	B	In: ext. mic	7 x I	Yes	XO 4.0.7	2.0.2.6

Note:

- Frame rate is limited to 25 fps.
- Contrast only via web interface.
- Iris not working.
- Reposition camera to autofocus.
- OSD and privacy mask only via web interface.

LG

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
LNB5320	2048 x 1536 Frame rate is limited to 5 fps. No brightness/ contrast/ saturation. OSD and privacy mask only via web interface.	2	B	In: ext. mic	I: NOK 1 x O	Focus only via web interface	XOa 3.2.17	2567.0.0.1506080
LND3220R	1920 x 1080 Frame rate is limited to 7 fps. No brightness/ contrast/ saturation. OSD and privacy mask only via web interface.	2	B	NA	NA	NA	XOa 3.2.17	2478.0.0.1502240
LNP3020T	HD 2 MP	2	B	Audio in	NOK	OK	XOa 3.2.12	1891.0.0.1410150
LNU5110R	1280 x 720 Frame rate is limited to 5 fps. OSD and privacy mask only via web interface.	2	B	In: ext. mic	NOK	NOK	XOa 3.2.17	2211.0.0.1505220
LNV7210R	1920 x 1080 Frame rate is limited to 5 fps. OSD only via web interface.	2	B	In: ext. mic	NOK	NOK	XOa 3.2.17	2237.0.0.1505220

Note:

The list above contains only the LG cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar LG cameras, using the same firmware, also function correctly. It concerns the following camera types:

- LNB5220
- LNB7210
- LND3110R
- LND5110R
- LND5220R
- LND7210

- LND7210R
- LNP2810T
- LNP3022T
- LNU3110R
- LNU3220R
- LNU7210R
- LNU7210RH
- LNV5110R
- LNV7210
- LNV7210RH

Milesight

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
MS-C2951-PB	1920 x 1080	2	B	In: ext. mic Audio out	1 x O	NA	XO 4.2.10	40.7.0.63-r6

Note:

- Enable audio in the camera web interface.
- Audio out with XO firmware version 4.3 and above.
- OSD and privacy mask only via web interface.

Moog

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
EXO-HD	SD	2	B	NOK	NOK	NA	XOa 3.2.17	4.0.0.5

Note:

- Brightness, contrast, saturation not available.
- OSD and privacy mask only via web interface.

Redvision

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
RVX-IP30-IRWL-W	Full HD	2	B	NA	NA	Yes	XO 4.2.8	Release 1.3.2280

Note:

- No focus, no iris, no brightness/contrast/saturation.
- With XO 4.02.0010 and above, use PTZ preset 198 for wash, PTZ preset 199 for wipe, and PTZ preset 200 for lights (day/night toggle).

In the camera web interface, assign the shortcuts accordingly: choose Basic Config, and scroll down to Shortcuts. Once enabled in the web interface, the XO client user can use the PTZ presets in the XO client for controlling wash/wipe/lights.

- OSD and privacy mask only via web interface.

You need to perform initial camera setup using the camera's web interface. Proceed as follows:

Step 1. Open the camera web interface and click **Video Streaming Profiles**.

Step 2. Set the parameters as follows:

- Set **Imager Mode** to **1080p30** (or 720p30 if a 720p model).
- Set **Stream+Codec** to **Dual H.264**.

Step 3. Click **Apply & Restart**. The camera will restart. After restarting, you will see pages for 2 streams.

Step 4. On the **Stream 1** page, set the parameters as follows:

- 1080p (or 720p for a 720p model).
- The preferred frame rate is up to 30 fps.
- **Important!** Set the I-frame interval to 4x that of the stream. For example: if using 15 fps, then set the interval to 60; if using 25 fps, then set the interval to 100....

Step 5. Click **SYNC** at the bottom of the Stream 1 page.

Step 6. On the **Stream 2** page, set the parameters as follows:

- VGA
- 5 fps
- I-frame interval = 20.

Step 7. Click **SYNC** at the bottom of the Stream 2 page.

The camera is now ready for use with XO.

The list above contains only the Redvision cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar Redvision cameras, using the same firmware, also function correctly. It concerns the following camera types:

- RVX-IP30
- RVX-IP30-W
- RVX-IP30-IR-W
- RV-VOLANT-IP30-IRWL-W.

Santec

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
SNC-211FDIA	Full HD	2	B	NA	NA	Manual focus[1]	XO 4.0.7	2.210.BW00.8.R, build: 2016-04-11
SNC-6312IRH	HD 2 MP	2	B	In: ext. mic	1 x O	Zoom	XOa 3.0.10	1.0.4.500
SNC-8322HO	HD 2 MP	2	B	In: ext. mic	1 x O	OK	XOa 3.0.10	1.0.4.500

[1] Zoom and autofocus only via camera web interface. OSD and privacy mask only via web interface.

Note:

OSD and privacy mask only via web interface.

Scati

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
SED-11004N-E	704 x 576	2	B	NOK	NOK	Yes, autofocus and iris NOK	XOa 3.2.17	V3.1.6 build 130322

Note:

- This camera uses ONVIF v2.02.
- This camera also works with the Hikvision driver.

Sony

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
SNC-EB602R	1280 x 1024	2	B	NA	NA	NOK	XOa 3.2.12	2.6.1
SNC-EB632R	Full HD	2	B	NA	NA	Only zoom	XO 4.2.8	2.6.1
SNC-EM632R	Full HD	2	B	NA	NA	Only zoom	XOa 3.2.12	2.6.1
SNC-XM632	Full HD	2	B	In: built-in mic	NA	NA	XOa 3.2.12	2.5.0

Note:

- When using the ONVIF driver, you must enable the 2nd stream manually, using the camera's web interface.
- These cameras also work with the Sony driver.

Vista

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
VK2-1080BIR3V9F[1]	HD 2 MP	2	B	NA	NA	Zoom only	XOa 3.2.12	2.2.0-T4_release
VK2-1080VRDIR35V16e[2]	1920 x 1080	2	B	NA	NA	NA	XOa 3.2.17	1.6.4-T8-release
VK2-1080XIRPTZF[3]	1920 x 1080	2	B	In: ext. mic	1 x O	Yes[4]	XOa 3.2.17	1.4.2-X2_release
VK2-1080XNPR10Z[5]	1920 x 1080	2	B	In: ext. mic Audio out	1 x O	Yes	XO 4.2.8	1.6.9-X2_release
VK2-3MPVRDIR28V12re[6]	2048 x 1536	2	B	In: ext. mic Audio out	1 x O	Yes	XO 4.2.8	1.1.61-XE_release
VK2-HD20-SM[7]	1920 x 1080	2	B	In: ext. mic Audio out	1 x O	Yes	XO 4.2.8	1.9.2-X2_release
VK2-4MPXVRDIR28V12M	4 MP	3	D	In: ext. mic	NA	NA	XO 4.3.6	1.2.8-H_64_Release
VK2-2MPXVFDIR28V12M	2 MP	3	D	In: ext. mic	NA	NA	XO 4.3.6	1.2.7-H_52_Release

[1] PTZ: saving presets not possible.

[2] Frame rate is limited to 12 fps. OSD and privacy mask only via web interface.

[3] Frame rate is limited to 12 fps. OSD only available via web interface. Set camera to CBR (bitrate can go up dramatically with VBR in scenes with a lot of motion.)

[4] Focus and iris only available via web interface.

[5] Frame rate is limited to 12 fps. No autofocus. Enable I/O in camera web interface. No contrast or saturation. OSD and privacy mask only via web interface.

[6] Frame rate is limited to 12 fps. Enable I/O in camera web interface. No autofocus, use 'smartfocus' in

web interface instead. OSD and privacy mask only via web interface.

[7] Frame rate is limited to 12 fps. Contrast not working. Autofocus not working; use camera web interface or move camera slightly to autofocus again. Preset position 0 not supported. OSD and privacy mask only via web interface.

The list above contains only the Vista cameras that Honeywell has tested and approved according to its own protocols. It is possible (but not guaranteed) that similar Vista cameras, using the same firmware, also function correctly. It concerns the following camera types:

- Similar to VK2-1080XNPR10Z:
- VK2-1080XBIR28V11F
- VK2-1080XVFD3V9e
- VK2-1080XVFD3V9F
- VK2-1080XVRD3V9e
- VK2-1080XVRDIR3V9F

Similar to VK2-3MPVRDIR28V12re:

- VK2-3MPBIR28V12re
- VK2-3MPEFEDre
- VK2-3MPVFDIR37e
- VK2-3MPVRDIR37e

Similar to VK2-HD20-SM:

- VK2-HD20-PM
- VK2-HD30-PM
- VK2-HD30IR-PM
- VK2-HD30LRIR-PM

Vivotek

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
IB8367A[1]	Full HD	3	D	NA	NA	NA	XOa 3.2.33	0100b
IB8369	HD 2 MP	2	B	NA	NA	Zoom	XOa 3.2.17	0102a
IB8369A[2]	Full HD	3	D	NA	NA	NA	XOa 3.2.33	0100f
IP8371[3]	3 MP	2	B	In: ext. mic	1 x O	NOK	XO 4.2.8	0300b

[1] You must disable "Dynamic intra frame period" in web interface. Analytics image quality is low for visualisation.

[2] You must disable "Dynamic intra frame period" in web interface. Analytics image quality is low for visualisation.

[3] At 25 fps and high bitrates, fps can drop to 15 or lower. Zoom and focus (manual/auto): use the web

interface.

Note:

- Maximum delivered frame rate is 23–24 fps.
- OSD and privacy mask only via web interface.

Xeno

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
XIPDC1080-4	Full HD	2	B	NA	NA	NA	XOa 3.2.12	1.3.5.11

Note:

- Frame rate is limited to 12 fps.

Uniview

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
IPC2222EBR5-HDUPF40	2 MP	2	B	NA	NA	NA	XO 4.5.7	IPC_G6102-B5020P30D1806
IPC2328SBR5-DPZ	8 MP	2	B	NA	1 x O	NA	XO 4.5.7	IPC_Q1203-B0006P20D1806
IPC3615ERE3-ADUPF28M	2 MP	2	B	In: ext. mic Audio out	NA	NA	XO 4.5.7	IPC_G6102-B502P30D1806
IPC2122LR3-PF-40M-D	2 MP	2	B	NA	NA	NA	XO 4.5.7	IPC_D1202-B0005P20D1809
IPC868ER-VF18-B	12 MP	2	B	Audio In (mic/line) Audio Out (speaker/line)	2 x I 1 x O	N/A	4.5.13	IPC_Q1203-B0007P32D1809C41
IPC815SR-DVPF14	5 MP	2	B	Audio In (mic/line) Audio Out (line)	1 x 1 1 x O	N/A	4.5.13	IPC_G6106-B0005P60D1812LJ01

Safire

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
SF-IPDM360-12Y	12 MP	2	B	Audio In (mic/line) Audio Out (speaker/line)	1 x I	N/A	4.5.13	V5.5.73 build 190603
SF-IPDM360-12	12 MP	2	B	Audio In (mic/line)	NOK	N/A	4.5.13	V5.4.5 build 170324
SF-IPDM360W-5	5 MP	2	B	Audio In (line)	NOK	N/A	4.5.13	V5.4.5 build 171026

Hanwha techwin

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
QNV-8080R	5 MP	2	B	Yes	1 x I 1 x O	NA	XO 4.5.7	ZMW96V4M600001W

TOA

Type	Resolution	# of video streams	Video stream behaviour	Audio	I/O	PTZ	ADPRO device FW	Cam FW
UC- 4SC615 Q IP Horn Speaker	NA	NA	NA	Out: built-in speaker	NA	NA	XO 4.5.7	V1.1.0.0.7

APPENDIX

A RONIX IP CAMERA SETUP

For correct operation with ADPRO devices, provide the following settings in the Ronix camera web interface:

- Network configuration
- H.264 stream
- RTSP

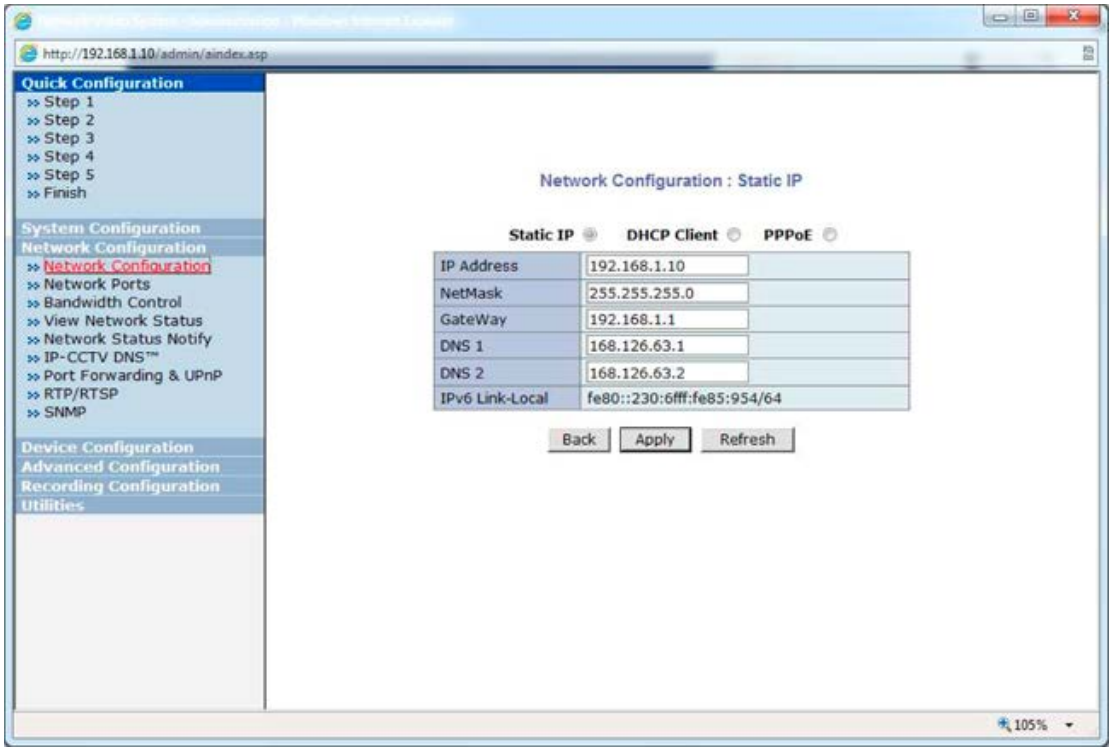
The following assumptions are made:

- Default ID = ‘root’, password = ‘root’.
- Default network setup:
  - Camera IP address: 192.168.1.10
  - Subnet mask: 255.255.255.0
  - Gateway: 192.168.1.1
- Minimum software version 4.00 is required.

To set up Ronix IP cameras, proceed as follows:

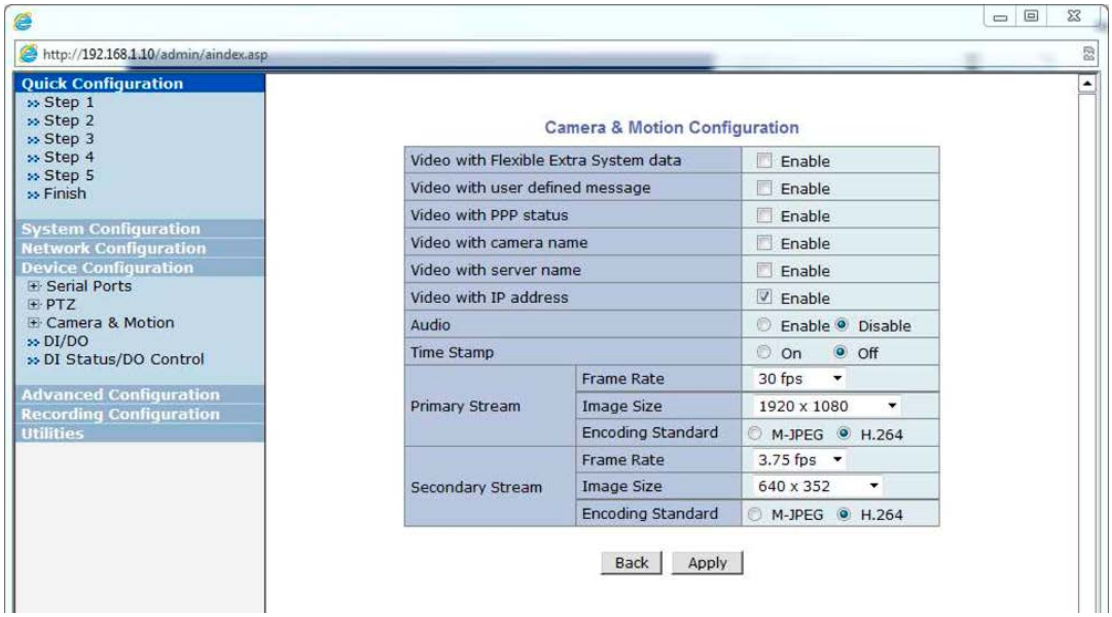
Step 1. Open the web interface and log on.

Step 2. Choose **Network Configuration** > **Network Configuration**, and set up as shown below:



Step 3. Click **Apply**.

Step 4. Choose **Device Configuration** > **Camera & Motion**.



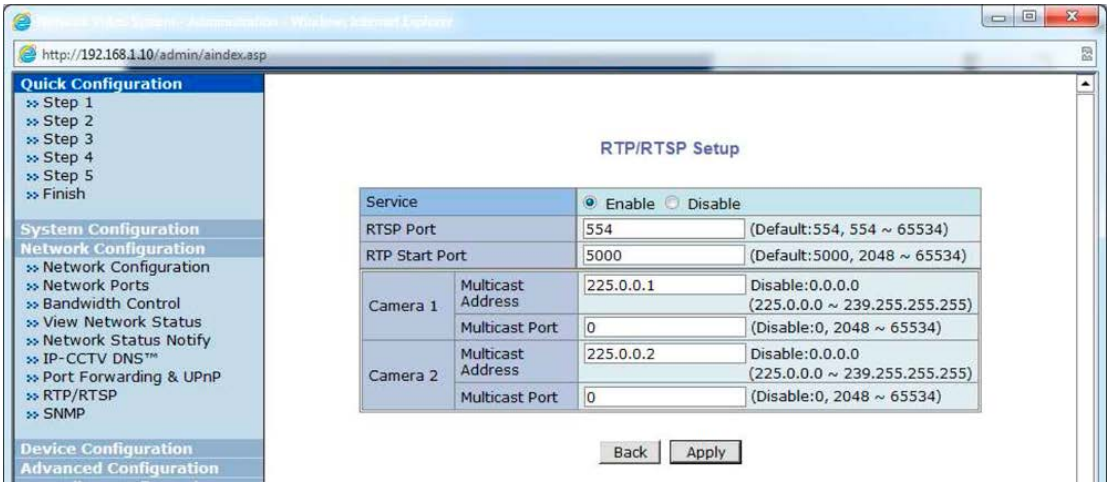
Step 5. For **Primary Stream**: set the **Frame Rate** to the desired value.

Step 6. For **Secondary Stream**:

- Set the **Frame Rate** to **3.75 fps** or **5 fps**.
- Set **Image Size** to **640 x 352**.

Step 7. Click **Apply**.

Step 8. Choose **Network Configuration** > **RTP/RTSP**.



Step 9. For **Camera 1**: set **Multicast Address** to **225.0.0.1**

Step 10. For **Camera 2**: set **Multicast Address** to **225.0.0.2**

Step 11. Click **Apply**.

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