



**BOSCH**

Invented for life

# IP Video product overview

January 2017

# Table of Contents

Dome Cameras	4
Panoramic Cameras	11
Fixed Cameras	12
Specialty Cameras	16
Moving Cameras	18
Digital Recording	22
Digital Storage	24
Video Software	26
Viewing Software	28
Encoders and Deconders	29
Transcoders	30
Flat panel monitors	31

# Added value for you

## Intelligent Dynamic Noise Reduction

Quiet scenes with little or no movement require a lower bitrate. By intelligently distinguishing between noise and relevant information, such as movement, Intelligent Dynamic Noise Reduction reduces bitrate by up to 50%. And because noise is reduced at the source during image capture, the lower bitrate does not compromise video quality. With Intelligent Dynamic Noise Reduction, our focus is to significantly reduce storage costs, and lessen network strain by only using bandwidth when needed.

## Intelligent Auto Exposure

Fluctuations in backlight and front light can ruin your images. To achieve the perfect picture in every situation, Intelligent Auto Exposure automatically adjusts the exposure of the camera. It offers superb front light compensation and incredible backlight compensation by automatically adapting to changing light conditions. With Intelligent Auto Exposure, our focus is to provide you with perfect exposure every time.

## Intelligent Tracking

In video surveillance, moving objects are usually the most significant objects of interest. Intelligent Tracking automatically tracks moving objects based on predefined alarm rules or a simple click. By intelligently distinguishing between single and multiple reference points, Intelligent Tracking will provide uninterrupted tracking. Optimal capture of the object of interest is assured by dynamically adjusting the field of view. With Intelligent Tracking, our focus is never

to lose track of objects of interest.

## Intelligent video analytics at the edge

Video analytics acts as the 'brains' of your security system, using metadata to add sense and structure to your video footage. This in turn enables your network video cameras to understand what they're seeing and alert you to any potential threats the moment they happen. Each camera in effect becomes smart. Allowing you to retrieve the right footage from hours of stored video instantly, analyse the scene by providing all kinds of statistics (metadata) and take appropriate action faster, easier and more efficiently. Tailor your solution to your exact needs, Bosch smart cameras feature two different types of Video Analytics as standard:

### Essential Video Analytics

Perfect for small and medium businesses, large stores, and commercial buildings.

- Advanced intrusion detection
- Enforcing health and safety regulations
- Loitering
- Left object
- Analyzing behavior in retail environments

### Intelligent Video Analytics

Can do everything that Essential Video Analytics does. It is specifically designed for the most demanding environments. It delivers the highest levels of accuracy for mission critical applications such as:

- Perimeter protection of airports, critical infrastructures and government buildings
- Ship tracking in harbors or coastal environments
- Traffic monitoring in challenging environments

- Excellent tracking of objects in extreme weather

## starlight

Bosch cameras with starlight technology are the gold standard in low light video performance. The original just got better with improved light sensitivity, a wide choice of resolutions, various form factors, dynamic ranges up to 120 dB, framerates of up to 60 frames per second and video analytics at the edge as a standard. Make sure you're not left in the dark. To take your video surveillance solution to the next level, always choose original starlight cameras from Bosch.

Back in 2012, Bosch introduced the world's first starlight cameras. Designed to give excellent images, even in the lowest light conditions, they revolutionized the industry and created true 24/7 surveillance. The latest sensor technology, combined with sophisticated noise suppression, results in a light sensitivity of 0.00825 lux in color and 0.00275 lux in monochrome. This enables starlight cameras to produce full color images in the dark beyond the point where other cameras have switched to monochrome. Where other cameras fail to show any image at all, starlight cameras are still capable of delivering detailed monochrome images.

## 4K ultra HD

Covering a large area and identifying objects at a great distance is challenging. That's why the 4K ultra HD technology in our DINION IP ultra 8000 MP offers 12 megapixel resolution to deliver amazing detail even when zoomed-in. With

an incredibly high frame rate of 20 frames per second for a 12 megapixel camera, you can capture fast moving objects in high resolutions. This speed and these resolutions provide the level of detail that makes the difference when collecting evidence. The images produced are perfect for a detailed and effective retrospective analysis. The camera's ability to give a wide-angle overview and multiple focus points on a single screen helps you focus on details without losing the bigger picture. With the DINION IP ultra 8000 MP, our focus is to enable you to see every detail, everywhere.

## Data security

Bosch is driving a four-step approach to maximize data security by considering physical and cyber security. It involves creating trust, securing the data, managing user access rights and meeting IT industry standards. Because the camera is often the most remote outpost in a network it is therefore easily overlooked when implementing data security measures. We have several measures in place to secure our cameras. One measure is that all Bosch IP cameras feature a unique, built-in **Trusted Platform Module (TPM)**. This safely stores all certificates and keys needed for authentication and encryption. Even in cases of unauthorized access, the TPM ensures that the keys cannot be retrieved.

## IP Video

### Dome Cameras

► FLEXIDOME IP micro 2000

► FLEXIDOME IP micro 5000



■ Available – Not available

Commercial Type Number		NUC-21002-F2	NUC-21012-F2	NUC-51022-Fxx	NUC-51051-Fxx
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent Auto Exposure / Intelligent Defog starlight (extreme low-light sensitivity)	-/-	-/-	-/-	-/-
	4K ultra HD	-	-	-	-
		-	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-	-
	Intelligent Video Analytics	-	-	-	-
Basic features	Maximum resolution	VGA	HD 720p	HD 1080p	5 MP
	Image sensor type	1/4"	1/4"	1/2.7"	1/3"
	Max. frames per second (fps)	30 fps@ 480p	30 fps@ 720p	30 fps@ 1080p	12 fps@ 5MP
	Indoor / outdoor / in-vehicle	■/-/-	■/-/-	■/■/■	■/■/■
	Day / night	■ (electronic)	■ (electronic)	■ (electronic)	■ (electronic)
	Wide Dynamic Range (WDR)	76dB	76dB	76dB	65dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	■	■	-	-
	Power over Ethernet (PoE)	■	■	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams	■/4 streams
Privacy masking		■	■	■	■
Region Of Interest tracking		-	-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	-	-	-	-
	Audio detection	■	■	-	-
Sensitivity	Minimum illumination day mode (color)	1 lux	1 lux	0.4 lux (F4) 1 lux (F2/F2M)	0.8 lux (F4) 2 lux (F2/F2M)
	Minimum illumination night mode (black/white)	-	-	0.4 lux (F4) 1 lux (F2/F2M)	0.8 lux (F4) 2 lux (F2/F2M)
	Night vision	-	-	-	-
	Max. range at night	-	-	-	-
Lens	Automatic Back Focus (ABF)	-	-	-	-
	Automatic varifocal	-	-	-	-
	Focal length	2.5 mm	2.5 mm	3.6 mm (F4) 2.5 mm (F2/F2M)	3.6 mm (F4) 2.5 mm (F2/F2M)
	Horizontal Angle of View (HAoV)	66.7°	89°	97° (F4) 135° (F2/F2M)	74° (F4) 105° (F2/F2M)
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	24/10/5/2	26/10/5/3	34/13/7/3 (F4) 16/6/3/2 (F2)	69/27/14/7 (F4) 40/16/8/4 (F2)
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	-/-	-/-	-/-	-/-
	Audio in / out	-	-	-	-
	Hybrid / public view monitor	-/■	-/■	-/■	-/■
Housing	Weather rating	-	-	IP66	IP66
	Vandal resistant	-	-	IK08	IK08
	Operating temperature	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)

# IP Video

## Dome Cameras

► FLEXIDOME IP indoor 4000 HD

► FLEXIDOME IP indoor 4000 IR

► FLEXIDOME IP outdoor 4000 HD

► FLEXIDOME IP outdoor 4000 IR



■ Available – Not available

Commercial Type Number		NIN-41012-V3	NII-41012-V3	NDN-41012-V3	NDI-41012-V3
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent Auto Exposure / Intelligent Defog	- / ■	- / ■	- / ■	- / ■
	starlight (extreme low-light sensitivity)	-	-	-	-
	4K ultra HD	-	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-	-
	Intelligent Video Analytics	-	-	-	-
Basic features	Maximum resolution	HD 720p/1.3 MP (4:3)	HD 720p/1.3 MP (4:3)	HD 720p/1.3 MP (4:3)	HD 720p/1.3 MP (4:3)
	Image sensor type	1/2.7"	1/2.7"	1/2.7"	1/2.7"
	Max. frames per second (fps)	30 fps@ 720p	30 fps@ 720p	30 fps@ 720p	30 fps@ 720p
	Indoor / outdoor / in-vehicle	■ / - / -	■ / - / -	■ / ■ / -	■ / ■ / -
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	76dB	76dB	76dB	76dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	■	■	-	-
	Power over Ethernet (PoE)	■	■	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams	■/4 streams
Privacy masking		■	■	■	■
Region Of Interest tracking		-	-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	-	-	-	-
	Audio detection	■	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.24 lux	0.24 lux	0.24 lux	0.24 lux
	Minimum illumination night mode (black/white)	0.05 lux	0 lux (IR on)	0.05 lux	0 lux (IR on)
	Night vision	-	■ (infrared)	-	■ (infrared)
	Max. range at night	-	15 m (50 ft)	-	15 m (50 ft)
Lens	Automatic Back Focus (ABF)	-	-	-	-
	Automatic varifocal	-	-	-	-
	Focal length	3.3 - 10 mm	3.3 - 10 mm	3.3 - 10 mm	3.3 - 10 mm
	Horizontal Angle of View (HAoV)	35.3° - 105.5°	35.3° - 105.5°	35.3° - 105.5°	35.3° - 105.5°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	16-79/6-31/3-16/2-8	16-79/6-31/3-16/2-8	16-79/6-31/3-16/2-8	16-79/6-31/3-16/2-8
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	1/1	1/1	1/1	1/1
	Audio in / out	■/■	■/■	■/■	■/■
	Hybrid / public view monitor	■/■	■/■	■/■	■/■
Housing	Weather rating	-	-	IP66	IP66
	Vandal resistant	-	-	IK10	IK10
	Operating temperature	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)	-40° to 50° C (-22° to 122° F)	-40° to 50° C (-22° to 122° F)

## IP Video

### Dome Cameras

► FLEXIDOME IP indoor 5000 HD

► FLEXIDOME IP indoor 5000 MP



■ Available – Not available

Commercial Type Number		NIN-51022-V3	NIN-50022-A3	NIN-50051-A3
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■
	Intelligent Auto Exposure / Intelligent Defog starlight (extreme low-light sensitivity)	- / ■	- / ■	- / ■
	4K ultra HD	-	-	-
		-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-
	Intelligent Video Analytics	-	-	-
Basic features	Maximum resolution	HD 1080p	HD 1080p	5MP
	Image sensor type	1/2.7"	1/2.7"	1/3"
	Max. frames per second (fps)	30 fps@ 1080p	30 fps@ 1080p	12 fps@ 5MP
	Indoor / outdoor / in-vehicle	■ / - / -	■ / - / -	■ / - / -
	Day / night	■	■	■
	Wide Dynamic Range (WDR)	76dB	76dB	81dB
	ONVIF conformant	■	■	■
	Built-in microphone	■	■	■
	Power over Ethernet (PoE)	■	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams
Privacy masking		■	■	■
Region Of Interest tracking		-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■
	Built-in video analytics	-	-	-
	Audio detection	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.24 lux	0.24 lux	0.35 lux
	Minimum illumination night mode (black/white)	0.05 lux	0.05 lux	0.05 lux
	Night vision	-	-	-
	Max. range at night	-	-	-
Lens	Automatic Back Focus (ABF)	-	-	-
	Automatic varifocal	-	■	■
	Focal length	3 - 10 mm	3 - 10 mm	3 - 10 mm
	Horizontal Angle of View (HAoV)	36° - 117°	36° - 117°	27.8° - 86.6°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	24-118/9-47/5-24/2-12	24-118/9-47/5-24/2-12	55-208/22-83/11-42/5-21
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	1/1	1/1	1/1
	Audio in / out	■/■	■/■	■/■
	Hybrid / public view monitor	■/■	■/■	■/■
Housing	Weather rating	-	-	-
	Vandal resistant	-	-	-
	Operating temperature	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)



## IP Video

### Dome Cameras

#### ► FLEXIDOME IP indoor 5000 IR



■ Available – Not available

Commercial Type Number		NII-51022-V3	NII-50022-A3	NII-50051-A3
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■
	Intelligent Auto Exposure / Intelligent Defog starlight (extreme low-light sensitivity)	- / ■	- / ■	- / ■
	4K ultra HD	-	-	-
		-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-
	Intelligent Video Analytics	-	-	-
Basic features	Maximum resolution	HD 1080p	HD 1080p	5MP
	Image sensor type	1/2.7"	1/2.7"	1/3"
	Max. frames per second (fps)	30 fps@ 1080p	30 fps@ 1080p	12 fps@ 5MP
	Indoor / outdoor / in-vehicle	■ / - / -	■ / - / -	■ / - / -
	Day / night	■	■	■
	Wide Dynamic Range (WDR)	76dB	76dB	81dB
	ONVIF conformant	■	■	■
	Built-in microphone	■	■	■
	Power over Ethernet (PoE)	■	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams
Privacy masking		■	■	■
Region Of Interest tracking		-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■
	Built-in video analytics	-	-	-
	Audio detection	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.24 lux	0.24 lux	0.35 lux
	Minimum illumination night mode (black/white)	0 lux (IR on)	0 lux (IR on)	0 lux (IR on)
	Night vision	■ (infrared)	■ (infrared)	■ (infrared)
	Max. range at night	15 m (50 ft)	15 m (50 ft)	15 m (50 ft)
Lens	Automatic Back Focus (ABF)	-	-	-
	Automatic varifocal	-	■	■
	Focal length	3 - 10 mm	3 - 10 mm	3 - 10 mm
	Horizontal Angle of View (HAoV)	36° - 117°	36° - 117°	27.8° - 86.6°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	24-118/9-47/5-24/2-12	24-118/9-47/5-24/2-12	55-208/22-83/11-42/5-21
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	1/1	1/1	1/1
	Audio in / out	■/■	■/■	■/■
	Hybrid / public view monitor	■/■	■/■	■/■
Housing	Weather rating	-	-	-
	Vandal resistant	-	-	-
	Operating temperature	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)

## IP Video

### Dome Cameras

▶ FLEXIDOME IP outdoor 5000 HD

▶ FLEXIDOME IP outdoor 5000 IR

▶ FLEXIDOME IP outdoor 5000 MP

▶ FLEXIDOME IP outdoor 5000 IR



■ Available – Not available

Commercial Type Number		NDN-50022-A3	NDI-50022-A3	NDN-50051-A3	NDI-50051-A3
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent Auto Exposure / Intelligent Defog	- / ■	- / ■	- / ■	- / ■
	starlight (extreme low-light sensitivity)	-	-	-	-
	4K ultra HD	-	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-	-
	Intelligent Video Analytics	-	-	-	-
Basic features	Maximum resolution	HD 1080p	HD 1080p	5MP	5MP
	Image sensor type	1/2.7"	1/2.7"	1/3"	1/3"
	Max. frames per second (fps)	30 fps@ 1080p	30 fps@ 1080p	12 fps@ 5MP	12 fps@ 5MP
	Indoor / outdoor / in-vehicle	■/■/-	■/■/-	■/■/-	■/■/-
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	76dB	76dB	81dB	81dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	-	-	-	-
	Power over Ethernet (PoE)	■	■	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams	■/4 streams
Privacy masking		■	■	■	■
Region Of Interest tracking		-	-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	-	-	-	-
	Audio detection	■	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.24 lux	0.24 lux	0.35 lux	0.35 lux
	Minimum illumination night mode (black/white)	0.05 lux	0 lux (IR on)	0.05 lux	0 lux (IR on)
	Night vision	-	■ (infrared)	-	■ (infrared)
	Max. range at night	-	15 m (50 ft)	-	15 m (50 ft)
Lens	Automatic Back Focus (ABF)	-	-	-	-
	Automatic varifocal	■	■	■	■
	Focal length	3 - 10 mm	3 - 10 mm	3 - 10 mm	3 - 10 mm
	Horizontal Angle of View (HAoV)	36° - 117°	36° - 117°	27.8° - 86.6°	27.8° - 86.6°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	24-118/9-47/5-24/2-12	24-118/9-47/5-24/2-12	55-208/22-83/11-42/5-21	55-208/22-83/11-42/5-21
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	1/1	1/1	1/1	1/1
	Audio in / out	■/■	■/■	■/■	■/■
	Hybrid / public view monitor	■/■	-/■	■/■	■/■
Housing	Weather rating	IP66	IP66	IP66	IP66
	Vandal resistant	IK10	IK10	IK10	IK10
	Operating temperature	-40° to 50° C (-22° to 122° F)	-40° to 50° C (-22° to 122° F)	-40° to 50° C (-22° to 122° F)	-40° to 50° C (-22° to 122° F)



## IP Video

### Dome Cameras

►FLEXIDOME IP starlight 6000 VR

►FLEXIDOME IP starlight 7000 VR

►FLEXIDOME IP starlight 6000 VR

►FLEXIDOME IP starlight 7000 VR



■ Available – Not available

Commercial Type Number		NIN-63013-Axxx	NIN-73013-Axxx	NIN-63023-Axxx	NIN-73023-Axxx
Bosch USPs	intelligent Dynamic Noise Reduction	■	■	■	■
	intelligent Auto Exposure / Intelligent Defog	■	■	■	■
	starlight (extreme low-light sensitivity)	■	■	■	■
	4K ultra HD	-	-	-	-
Video analytics at the edge	Essential Video Analytics	■	-	■	-
	Intelligent Video Analysis	-	■	-	■
Basic features	Maximum resolution	720p	720p	1.3MP / 1080p	1.3MP / 1080p
	Image sensor type	1/2.8"	1/2.8"	1/2.8"	1/2.8"
	Max. frames per second (fps)	60fps @ 720p	60fps @ 720p	60fps @ 1.3MP / 1080p	60fps @ 1.3MP / 1080p
	Indoor / outdoor / in-vehicle	■/■/-	■/■/-	■/■/-	■/■/-
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	-	-	-	-
	Power over Ethernet (PoE)	■	■	■	■
Advanced features	Compression (H.264 & MJPEG) / multi-streaming	■/4 streams	■/4 streams	■/4 streams	■/4 streams
	Privacy masking	■	■	■	■
	Region Of Interest tracking	■	■	■	■
	Upright video mode	■	■	■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	■	■	■	■
	Audio detection	■	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.0075 lux	0.0075 lux	0.0075 lux	0.0075 lux
	Minimum illumination night mode (black / white)	0.0011 lux	0.0011 lux	0.0011 lux	0.0011 lux
	Night vision	■ (starlight)	■ (starlight)	■ (starlight)	■ (starlight)
	Max. range at night	-	-	-	-
Lens	Automatic Back Focus (ABF)	■	■	■	■
	Automatic varifocal	■	■	■	■
	Focal length	3 - 9 mm (A3xx)	3 - 9 mm (A3xx) 10 - 23 mm (A10xx)	3 - 9 mm (A3xx)	3 - 9 mm (A3xx) 10 - 23 mm (A10xx)
	Horizontal Angle of View (HAoV)	37° - 117° (A3xx)	37° - 117° (A3xx) 14.4° - 32° (A10xx)	37° - 117° (A3xx)	37° - 117° (A3xx) 14.4° - 32° (A10xx)
DORI distances	Detect / Observe / Recognize / Identify (Distances in according to EN-IEC 62676-4 standard)	43-122/17-47/9-24/4-12 (A3xx)	43-122/17-47/9-24/4-12 (A3xx) 144-313/56-122/28-62/14-31 (A10xx)	43-122/17-47/9-24/4-12 (A3xx)	43-122/17-47/9-24/4-12 (A3xx) 144-313/56-122/28-62/14-31 (A10xx)
Storage	Memory card slot	■ up to 2 TB	■ up to 2 TB	■ up to 2 TB	■ up to 2 TB
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	2/1	2/1	2/1	2/1
	Audio in / out	■/■	■/■	■/■	■/■
	Hybrid / public view monitor	■/■	■/■	■/■	■/■
Housing	Weather rating	IP66 and NEMA type 4X	IP66 and NEMA type 4X	IP66 and NEMA type 4X	IP66 and NEMA type 4X
	Vandal resistant	IK10	IK10	IK10	IK10
	Operating temperature	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)

## IP Video

### Dome Cameras

► FLEXIDOME IP starlight 7000 RD

► FLEXIDOME IP 7000 RD

► FLEXIDOME IP dynamic 7000 RD



■ Available – Not available

Commercial Type Number		NDN-733Vxx-xx	NDN-832Vxx-xx	NDN-932Vxx-IP
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■
	Intelligent Auto Exposure / Intelligent Defog	■ (IVA models only)/■	■ (IVA models only)/■	■/■
	starlight (extreme low-light sensitivity)	■	-	-
	4K ultra HD	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-
	Intelligent Video Analytics	■ (depends on model/mode)	■ (depends on model/mode)	■
Basic features	Maximum resolution	HD 720p/1.3 MP (4:3)	HD 1080p	HD 1080p
	Image sensor type	1/3"	1/2.7"	1/3"
	Max. frames per second (fps)	60 fps@ 720p	30 fps@ 1080p	30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/■/-	■/■/-	■/■/-
	Day / night	■	■	■
	Wide Dynamic Range (WDR)	84dB (IVA model with IAE + 16dB)	76dB (IVA model with IAE + 16dB)	90dB (with IAE + 16dB)
	ONVIF conformant	■	■	■
	Built-in microphone	-	-	-
	Power over Ethernet (PoE)	■	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams
Privacy masking		■	■	■
Region Of Interest tracking		■	■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■
	Built-in video analytics	■ (depends on model)	■ (depends on model)	■
	Audio detection	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.017 lux	0.22 lux	0.25 lux
	Minimum illumination night mode (black/white)	0.0057 lux	0.05 lux	0.08 lux
	Night vision	■ (starlight)	-	-
	Max. range at night	-	-	-
Lens	Automatic Back Focus (ABF)	■	■	■
	Automatic varifocal	-	-	-
	Focal length	1.8 - 3 mm (V02-xx), 3.8 - 13 mm (V03-xx), 9 - 40 mm (V09-xx)	1.8 - 3 mm (V02-xx), 3.8 - 13 mm (V03-xx), 9 - 40 mm (V09-xx)	1.8 - 3 mm (V02-xx), 3.8 - 13 mm (V03-xx), 9 - 40 mm (V09-xx)
	Horizontal Angle of View (HAoV)	77° - 105° (V02-xx), 21° - 72° (V03-xx), 7.1° - 30° (V09-xx)	87° - 115° (V02-xx), 26° - 87° (V03-xx), 8.5° - 37° (V09-xx)	70°-98° (V02-xx), 19°-63° (V03-xx), 6.2°-26° (V09-xx)
DORI distances	Detect / Observe / Recognize / Identify	20-32/8-13/4-6/2-3 (V02-xx)	16-40/6-16/3-8/2-4 (V02-xx)	22-55/9-22/4-11/2-5 (V02-xx)
	(Distances according to EN-IEC 62676-4 standard)	35-138/14-55/7-28/4-14 (V03-xx)	27-166/11-66/5-33/3-17 (V03-xx)	42-229/17-91/8-46/4-23 (V03-xx)
		96-413/38-164/19-83/10-41 (V09-xx)	77-517/30-205/15-103/8-52 (V09-xx)	111-709/44-281/22-142/11-71 (V09-xx)
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Best Face Detection JPEG posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	2/1	2/1	2/1
	Audio in / out	■	■	■
	Hybrid / public view monitor	-/-	-/-	-/-
Housing	Weather rating	IP66 & IP67	IP66 & IP67	IP66 & IP67
	Vandal resistant	Exceeding IK10	Exceeding IK10	Exceeding IK10
	Operating temperature	-50° to 50° C (-58° to 122° F)	-50° to 50° C (-58° to 122° F)	-50° to 50° C (-58° to 122° F)

## IP Video

### Dome Cameras

►FLEXIDOME IP panoramic 5000 MP

►FLEXIDOME IP panoramic 5000 MP

►FLEXIDOME IP panoramic 7000 MP

►FLEXIDOME IP panoramic 7000 IC

reddot award 2015  
winner

■ Available – Not available

Commercial Type Number		NUC-52051-F0	NUC-52051-F0E	NIN-70122-Fx(A)	NFN-70122-Fx(A)
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	■ (customized region)/■	■ (customized region)/■
	intelligent Tracking	-	-	■	■
	starlight (extreme low-light sensitivity)	-	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	■ 6000 model	■ 6000 model
	Intelligent Video Analytics	-	-	■ 7000 model	■ 7000 model
Basic features	Maximum resolution	5MP	5MP	12MP	12MP
	Image sensor type	1/3"	1/3"	1/2.3"	1/2.3"
	Max. frames per second (fps)	15 fps	15 fps	30 fps	30 fps
	Indoor / outdoor / in-vehicle	■/-/-	■/■/-	■/-/-	■/-/-
	Day / night	■ (electronic)	■ (electronic)	■	■
	Wide Dynamic Range (WDR)	81dB	81dB	92dB (IVA model with IAE + 16dB)	92dB (IVA model with IAE + 16dB)
	ONVIF conformant	■	■	■	■
	Built-in microphone	■	-	■	-
	Power over Ethernet (PoE)	■	■	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams	■/4 streams
	Edge dewarping	-	-	■	■
	Privacy masking	■	■	■	■
	Region Of Interest tracking	-	-	■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	-	-	■ (depends on model)	■ (depends on model)
	Audio detection	■	-	■	■
	PTZ Intelligent Tracking	-	-	■	■
Sensitivity	Minimum illumination day mode (color)	0.36 lux	0.36 lux	0.46 lux (F1) 0.55 lux (F0)	0.46 lux (F1) 0.55 lux (F0)
	Minimum illumination night mode (black/white)	0.12 lux	0.12 lux	0.15 lux (F1) 0.18 lux (F0)	0.15 lux (F1) 0.18 lux (F0)
	Night vision	-	-	-	-
	Max. range at night	-	-	-	-
Lens	Focal length	1.19 mm	1.19 mm	1.6 mm (F1) 2.1 mm (F0)	1.6 mm (F1) 2.1 mm (F0)
	Horizontal Angle of View (HAoV)	360°	360°	180° (F1) 360° (F0)	180° (F1) 360° (F0)
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	19/7/4/1	19/7/4/1	19/12/6.5/3.5 (F1) 19/8.5/4.5/2 (F0)	19/12/6.5/3.5 (F1) 19/8.5/4.5/2 (F0)
Storage	Memory card slot	■ MicroSD (up to 2 TB)	■ MicroSD (up to 2 TB)	■ MicroSD (up to 2 TB)	■ MicroSD (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting
Connections	Alarm input / output	-	-	-	-
	Audio in / out	-	-	-	-
	Hybrid / public view monitor	-	-	-	-
Housing	Weather rating	-	IP66	-	-
	Vandal resistant	IK4	IK10	IK6	IK6
	Operating temperature	-20° C to +50° C (-4° F to 104° F)	-30° C to +50° C (-22° F to 122° F)	-20° C to +40° C (-4° F to 104° F)	-20° C to +40° C (-4° F to 104° F)

## IP Video

### Fixed Cameras

## ▶TINYON IP 2000 HD



## ▶TINYON IP 2000 WI



## ▶TINYON IP 2000 PIR



■ Available – Not available

Commercial Type Number		NPC-20012-F2(-W)	NPC-20012-F2WL(-W)	NPC-20012-F2L(-W)
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■
	Intelligent Auto Exposure / Intelligent Defog	-/-	-/-	-/-
	starlight (extreme low-light sensitivity)	-	-	-
	4K ultra HD	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-
	Intelligent Video Analytics	-	-	-
Basic features	Maximum resolution	HD 720p	HD 720p	HD 720p
	Image sensor type	1/4"	1/4"	1/4"
	Max. frames per second (fps)	30 fps@ 720p	30 fps@ 720p	30 fps@ 720p
	Indoor / outdoor / in-vehicle	■/-/-	■/-/-	■/-/-
	Day / night	■ (electronic)	■ (electronic)	■ (electronic)
	Wide Dynamic Range (WDR)	76dB	76dB	76dB
	ONVIF conformant	■	■	■
	Built-in microphone	■	■	■
	Power over Ethernet (PoE)	■	-	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams
Privacy masking		■	■	■
Region Of Interest tracking		-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■
	Built-in video analytics	-	-	-
	Audio detection	■	■	■
	Passive infrared (PIR) motion detection	-	■	■
Sensitivity	Minimum illumination day mode (color)	1 lux	1 lux 0 lux (with wLED)	1 lux 0 lux (with wLED)
	Minimum illumination night mode (black/white)	-	-	-
	Night vision	-	■ (wLED)	■ (wLED)
	Max. range at night	-	4 m (13 ft)	4 m (13 ft)
Lens	Automatic Back Focus (ABF)	-	-	-
	Automatic varifocal	-	-	-
	Focal length	2.5 mm	2.5 mm	2.5 mm
	Horizontal Angle of View (HAoV)	89°	89°	89°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	26/10/5/3	26/10/5/3	26/10/5/3
Storage	Memory card slot	■ (up to 2 TB)	-	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	-/-	■/■	■/■
	Audio in / out	-/- (built-in loudspeaker)	-/- (built-in loudspeaker)	-/- (built-in loudspeaker)
	Hybrid / public view monitor	-/-	-/-	-/-
	Wireless (WPS, IEEE 802, 11b/g/n)	-	■	-
Housing	Weather rating	-	-	-
	Vandal resistant	-	-	-
	Operating temperature	-10° to 50° C (14° to 122° F)	-10° to 40° C (14° to 104° F)	-10° to 45° C (14° to 113° F)

## IP Video

### Fixed Cameras

►DINION IP 4000 HD

►DINION IP 5000 HD

►DINION IP 5000 MP

►DINION IP bullet 4000 HD

►DINION IP bullet 5000 HD



■ Available – Not available

Commercial Type Number		NBN-40012-xxx	NBN-50022-xxx	NBN-50051-xxx	NTI-40012-A3(S)**	NTI-50022-A3(S)**
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■	■	■
	Intelligent Auto Exposure / Intelligent Defog starlight (extreme low-light sensitivity)	-/■	-/■	-/-	-/■	-/■
	4K ultra HD	-	-	-	-	-
		-	-	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-	-	-
	Intelligent Video Analytics	-	-	-	-	-
Basic features	Maximum resolution	HD 720p/1.3 MP (4:3)	HD 1080p	5MP	HD 720p	HD 1080p
	Image sensor type	1/2.7"	1/2.7"	1/3"	1/2.9"	1/2.9"
	Max. frames per second (fps)	30 fps@ 720p	30 fps@ 1080p	12 fps@ 5MP	30 fps@ 720p	30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/■ (with housing)/-	■/■ (with housing)/-	■/■ (with housing)/-	■/■/-	■/■/-
	Day / night	■	■	■	■	■
	Wide Dynamic Range (WDR)	76dB	76dB	81dB	76dB	76dB
	ONVIF conformant	■	■	■	■	■
	Built-in microphone	■	■	■	-	-
	Power over Ethernet (PoE)	■	■	■	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams	■/4 streams	■/4 streams
Privacy masking		■	■	■	■	■
Region Of Interest tracking		-	-	-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■	■/■
	Built-in video analytics	-	-	-	-	-
	Audio detection	■	■	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.25 lux	0.25 lux	0.35 lux	0.07 lux	0.07 lux
	Minimum illumination night mode (black/white)	0.05 lux	0.05 lux	0.05 lux	0 lux (IR on)	0 lux (IR on)
	Night vision	-	-	-	■ (infrared)	■ (infrared)
	Max. range at night	-	-	-	30 m (98 ft)	30 m (98 ft)
Lens	Automatic Back Focus (ABF)	-	-	-	-	-
	Automatic varifocal	-	-	-	■	■
	Focal length	3.3 - 12 mm (V3)/CS mount	3.3 - 12 mm (V3)/CS mount	3.3 - 12 mm (V3)/CS mount	2.7 - 12 mm	2.7 - 12 mm
	Horizontal Angle of View (HAoV)	34° - 110° (V3)	34° - 110° (V3)	25° - 82° (V3)	32° - 100°	32° - 100°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	18-84/7-33/4-17/2-8 (V3)	27-125/11-50/5-25/3-13 (V3)	60-234/24-93/12-47/6-23 (V3)	21-89/8-35/4-17/2-9	32-133/12-53/6-26/3-13
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	1/1	1/1	1/1	1/1	1/1
	Audio in / out	■/■	■/■	■/■	■/■	■/■
	Hybrid / public view monitor	■/■	■/■	■/■	■/■	■/■
Housing	Weather rating	-	-	-	IP66	IP66
	Vandal resistant	-	-	-	IK08	IK08
	Operating temperature	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)	-30° to 60° C (-22° to 140° F)	-30° to 60° C (-22° to 140° F)

\* The hybrid functionality offers an easy migration path from legacy CCTV to a modern IP-based system

\*\* The NTI-40012-A3S &amp; NTI-50022-A3S model has a pre-mounted Surface Mount Box

## IP Video

### Dome Cameras

►DINION IP starlight 6000 HD

►DINION IP starlight 7000 HD

►DINION IP starlight 6000 HD

►DINION IP starlight 7000 HD



■ Available – Not available

Commercial Type Number		NBN-63013-B **	NBN-73013-BA **	NBN-63023-B **	NBN-73023-BA **
Bosch USPs	intelligent Dynamic Noise Reduction	■	■	■	■
	intelligent Auto Exposure / Intelligent Defog	■/■	■/■	■/■	■/■
	starlight (extreme low-light sensitivity)	■	■	■	■
	4K ultra HD	-	-	-	-
Video analytics at the edge	Essential Video Analytics	■	-	■	-
	Intelligent Video Analysis	-	■	-	■
Basic features	Maximum resolution	720p	720p	1.3MP / 1080p	1.3MP / 1080p
	Image sensor type	1/2.8"	1/2.8"	1/2.8"	1/2.8"
	Max. frames per second (fps)	60fps @ 720p	60fps @ 720p	60fps @ 1.3MP / 1080p	60fps @ 1.3MP / 1080p
	Indoor / outdoor / in-vehicle	■/■(with housing)/-	■/■(with housing)/-	■/■(with housing)/-	■/■(with housing)/-
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	-	-	-	-
	Power over Ethernet (PoE)	■	■	■	■
	Advanced features	Compression (H.264 & MJPEG) / multi-streaming	■/4 streams	■/4 streams	■/4 streams
Privacy masking		■	■	■	■
Region Of Interest tracking		■	■	■	■
Upright video mode		■	■	■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	■	■	■	■
	Audio detection	■	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.0069 lux	0.0069 lux	0.0069 lux	0.0069 lux
	Minimum illumination night mode (black / white)	0.0008 lux	0.0008 lux	0.0008 lux	0.0008 lux
	Night vision	■ (starlight)	■ (starlight)	■ (starlight)	■ (starlight)
	Max. range at night	-	-	-	-
Lens	Automatic Back Focus (ABF)	■	■	■	■
	Automatic varifocal	-	-	-	-
	Focal length	Lenses available separately C/CS mount 1.8 - 3 mm, 3.8 - 13 mm, 9 - 40 mm	Lenses available separately C/CS mount 1.8 - 3 mm, 3.8 - 13 mm, 9 - 40 mm	Lenses available separately C/CS mount 1.8 - 3 mm, 3.8 - 13 mm, 9 - 40 mm	Lenses available separately C/CS mount 1.8 - 3 mm, 3.8 - 13 mm, 9 - 40 mm
	Horizontal Angle of View (HAoV)	depending on optional lens	depending on optional lens	depending on optional lens	depending on optional lens
DORI distances	Detect / Observe / Recognize / Identify	depending on optional lens	depending on optional lens	depending on optional lens	depending on optional lens
	(Distances in according to EN-IEC 62676-4 standard)	depending on optional lens	depending on optional lens	depending on optional lens	depending on optional lens
Storage	Memory card slot	■ up to 2 TB	■ up to 2 TB	■ up to 2 TB	■ up to 2 TB
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	2/1	2/1	2/1	2/1
	Audio in / out	■/■	■/■	■/■	■/■
	Hybrid / public view monitor	■/■	■/■	■/■	■/■
Housing	Weather rating	depending on optional housing	depending on optional housing	depending on optional housing	depending on optional housing
	Vandal resistant	depending on optional housing	depending on optional housing	depending on optional housing	depending on optional housing
	Operating temperature	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)

, \*\*Lens not included

## IP Video

### Fixed Cameras

#### ►DINION IP starlight 8000 MP



#### ►DINION IP ultra 8000 MP



■ Available – Not available

Commercial Type Number		NBN-80052-BA	NBN-80122-xxx
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■
	Intelligent Auto Exposure / Intelligent Defog starlight (extreme low-light sensitivity)	■/-	■/-
	4K ultra HD	-	-
		-	■
Video analytics at the edge	Essential Video Analytics	-	-
	Intelligent Video Analytics	■	■
Basic features	Maximum resolution	5 MP (16:9)/5.5 MP (4:3)	12 MP (4:3)/UHD (16:9)
	Image sensor type	1/1.8"	1/2.3"
	Max. frames per second (fps)	30 fps@ 5 MP	20 fps@ 12MP, 30 fps@ UHD
	Indoor / outdoor / in-vehicle	■/■ (with housing)/-	■/■ (with housing)/-
	Day / night	■	■
	Wide Dynamic Range (WDR)	97dB (5MP)/105dB (1080p) (with IAE + 16dB)	92dB (with IAE + 16dB)
	ONVIF conformant	■	■
	Built-in microphone	-	-
	Power over Ethernet (PoE)	■	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams
Privacy masking		■	■
Region Of Interest tracking		■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■
	Built-in video analytics	■	■
	Audio detection	■	■
Sensitivity	Minimum illumination day mode (color)	0.0121 lux (5 MP) 0.0083 lux (1080p)	0.36 lux (FxA) 0.11 lux (CA)
	Minimum illumination night mode (black/white)	0.004 lux (5 MP) 0.0028 lux (1080p)	0.12 lux (FxA) 0.037 lux (CA)
	Night vision	■ (starlight)	-
	Max. range at night	-	-
Lens	Automatic Back Focus (ABF)	■	-(FxA)/■(CA)
	Automatic varifocal	-	-
	Focal length	C/CS mount	3.2 mm (F2A) 5 mm (F6A) C/CS mount (CA) - 35/50/75
	Horizontal Angle of View (HAoV)	Depending on optional lens	71° (F6A) 120° (F2A) C/CS mount (CA) - 35/50/75
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	Depending on optional lens	46/18/9/5 (F2A) 114/45/23/11 (F6A) Depending on optional lens (CA)
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting
Connections	Alarm input / output	2/1	2/1
	Audio in / out	■/■	■/■
	Hybrid / public view monitor	■/■	-/-
Housing	Weather rating	-	-
	Operating temperature	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)



## IP Video Specialty Cameras

## ►DINION IP capture 5000

## ►DINION IP imager 9000 HD

## ►FLEXIDOME IP corner 9000 MP



■ Available – Not available

Commercial Type Number		NER-L2Rx-1	NAI-90022-AAA	NCN-90022-F1
Bosch USPs	Intelligent Dynamic Noise Reduction	-	■	■
	Intelligent Auto Exposure / Intelligent Defog	-/-	■/-	-/-
	starlight (extreme low-light sensitivity)	-	-	-
	4K ultra HD	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-
	Intelligent Video Analytics	-	■	-
Basic features	Maximum resolution	576p	HD 1080p	1080p
	Image sensor type	1/3"	1/2.7"	1/2.7"
	Max. frames per second (fps)	30 fps@ 576p	30 fps@ 1080p	30 fps@ 1080p
	Indoor / outdoor / in-vehicle	-/■/-	-/■/-	■/-/-
	Day / night	■	■	■
	Wide Dynamic Range (WDR)	120dB	76dB (with IAE +16dB)	76dB
	ONVIF conformant	■	■	■
	Built-in microphone	-	-	-
	Power over Ethernet (PoE)	■	■ (HiPoE)	■
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams
Privacy masking		-	■	■
Region Of Interest tracking		-	■	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■
	Built-in video analytics	-	■	-
	Audio detection	-	■	■
Sensitivity	Minimum illumination day mode (color)	-	0.4 lux	0.3 lux
	Minimum illumination night mode (black/white)	0 lux (IR on)	0 lux (IR on)	0 lux (IR on)
	Night vision	■ (infrared)	■ (infrared)	■ (infrared)
	Max. range at night	28 m (92 ft)	120 m (394 ft)	9 m (30 ft)
Lens	Automatic Back Focus (ABF)	-	■	-
	Automatic varifocal	-	■	-
	Focal length	5 - 50 mm varifocal (calibrated to optimal capture distance)	10 - 23 mm	2 mm
	Horizontal Angle of View (HAoV)	5.3° - 31.9°	14.8° - 34°	121°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	-	126-296/50-117/25-59/13-30	20/8/4/2
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Best Face Detection JPEG posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	-/-	1/1	1/1
	Audio in / out	-/-	■/■	■/■
	Hybrid / public view monitor	-/-	■/■	-/-
Housing	Weather rating	IP67	IP66	IP65
	Vandal resistant	-	IK10	IK10
	Operating temperature	-40° to 50° C (-40° to 122° F)	-40° to 50° C (-40° to 122° F)	-10° to 50° C (14° to 122° F)

## IP Video Specialty Cameras

►DINION IP thermal 8000      ►DINION IP thermal 8000



■ Available – Not available

Commercial Type Number		NHT-8000-F	NHT-8001-F
Bosch USPs	Intelligent Dynamic Noise Reduction	-	-
	Intelligent Auto Exposure / Intelligent Defog	-/-	-/-
	starlight (extreme low-light sensitivity)	-	-
	4K ultra HD	-	-
Video analytics at the edge	Essential Video Analytics	-	-
	Intelligent Video Analytics	■	■
Basic features	Maximum resolution	QVGA	VGA
	Image sensor type	Un-cooled vanadium oxide microbolometer	Un-cooled vanadium oxide microbolometer
	Max. frames per second (fps)	9 fps (-FxxQS) or 60 fps (-FxxQF)	9 fps (-FxxVS) or 30 fps (-FxxVF)
	Indoor / outdoor / in-vehicle	■/■/-	■/■/-
	Day / night	-	-
	Wide Dynamic Range (WDR)	-	-
	ONVIF conformant	■	■
	Built-in microphone	-	-
	Power over Ethernet (PoE)	-	-
Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams
	Privacy masking	Eight independent areas, fully programmable	Eight independent areas, fully programmable
	Region Of Interest tracking	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■
	Built-in video analytics	■	■
	Audio detection	■	■
Sensitivity	Minimum illumination day mode (color)	-	-
	Minimum illumination night mode (black/white)	0 lux	0 lux
	Night vision	■ (thermal)	■ (thermal)
	Max. range at night	Depending on optional lens	Depending on optional lens
Lens	Automatic Back Focus (ABF)	-	-
	Automatic varifocal	-	-
	Focal length	7.5 mm (-F07Qx), 19 mm (-F19Qx)	9 mm (-F09Vx), 16.7 mm (-F17Vx), 35 mm (-F35Vx), 65 mm (-F65Vx)
	Horizontal Angle of View (HAoV)	-	-
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	Depending on optional lens	Depending on optional lens
Storage	Memory card slot	■ (up to 2TB)	■ (up to 2TB)
	Cloud application storage	Auto or Alarm JPEG Posting (FTP only)	Auto or Alarm JPEG Posting (FTP only)
Connections	Alarm input / output	2/1	2/1
	Audio in / out	■/■	■/■
	Hybrid / public view monitor	■	■
Housing	Weather rating	IP66	IP66
	Vandal resistant	-	-
	Operating temperature	-50° to 55° C (-58° to 131° F)	-50° to 55° C (-58° to 131° F)

## IP Video

### Moving Cameras

▶AUTODOME IP 4000 HD



▶AUTODOME IP 4000 HD



■ Available – Not available

Commercial Type Number		NEZ-4112-XXXW4	NEZ-4212-XXXW4
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■
	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■
	Intelligent Tracking	-	-
	starlight (extreme low-light sensitivity)	-	-
Video analytics at the edge	Essential Video Analytics	-	-
	Intelligent Video Analytics	-	-
Basic features	Maximum resolution	HD 720p	HD 1080p
	Image sensor type	1/2.8" CMOS	1/2.8" CMOS
	Max. frames per second (fps)	30 fps@ 720p	30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/-/-	■/-/-
	Day / night	■	■
	Wide Dynamic Range (WDR)	76dB	76dB
	ONVIF conformant	■	■
	Built-in microphone	-	-
	Power over Ethernet (PoE)	■ (PoE+)	■ (PoE+)
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams
Privacy masking		■	■
Nbr of presets/guard tours		256/2	256/2
Wiper		-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■
	Built-in video analytics	-	-
	Audio detection	■	■
	PTZ Intelligent Tracking	-	-
Sensitivity	Minimum illumination day mode (color)	0.17 lux	0.17 lux
	Minimum illumination night mode (black/white)	0.039 lux	0.039 lux
	Night vision	-	-
	Max. range at night	-	-
Lens	Focal length	5.1 ~ 61.2 mm	5.1 ~ 61.2 mm
	Horizontal Angle of View (HAoV)	4.64° to 51.3°	4.64° to 51.3°
	PTZ Zoom optical/digital	12x/16x	12x/16x
	Tilt angle	-90° to 0°	-90° to 0°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	53-632/21-251/11-126/5-63	80-948/32-376/16-190/8-95
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	2/1	2/1
	Audio in / out	■/■	■/■
	Hybrid / public view monitor	-/-	-/-
Housing	Weather rating	IP65 (pendant)/IP51 (in-ceiling)	IP65 (pendant)/IP51 (in-ceiling)
	Vandal resistant	IK10	IK10
	Operating temperature	-10° to 60° C (-14° to 140° F)	-10° to 60° C (-14° to 140° F)

## IP Video

### Moving Cameras

▶AUTODOME IP 5000 HD



▶AUTODOME IP 5000 HD



▶AUTODOME IP 5000 IR



▶AUTODOME IP 5000 IR



■ Available – Not available

Commercial Type Number		NEZ 5130-XXXW4	NEZ 5230-XXXW4	NEZ 5130-IRCW4	NEZ 5230-IRCW4
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	-/■	-/■
	Intelligent Tracking	-	-	-	-
	starlight (extreme low-light sensitivity)	-	-	-	-
Video analytics at the edge	Essential Video Analytics	-	-	-	-
	Intelligent Video Analytics	-	-	-	-
Basic features	Maximum resolution	HD 720p	HD 1080p	HD 720p	HD 1080p
	Image sensor type	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
	Max. frames per second (fps)	30 fps@ 720p	30 fps@ 1080p	30 fps@ 720p	30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/■/-	■/■/-	-/■/-	-/■/-
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	76dB	76dB	76dB	76dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	-	-	-	-
	Power over Ethernet (PoE)	■ (PoE+)	■ (PoE+)	■ (PoE+)	■ (PoE+)
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams	■/4 streams
Privacy masking		■	■	■	■
Nbr of presets/guard tours		256/2	256/2	256/2	256/2
Wiper		-	-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	-	-	-	-
	Audio detection	■	■	■	■
	PTZ Intelligent Tracking	-	-	-	-
Sensitivity	Minimum illumination day mode (color)	0.22 lux	0.22 lux	0.11 lux	0.11 lux
	Minimum illumination night mode (black/white)	0.044 lux	0.044 lux	0 lux (IR on)	0 lux (IR on)
	Night vision	-	-	■ (infrared)	■ (infrared)
	Max. range at night	-	-	180 m (590 ft)	180 m (590 ft)
Lens	Focal length	4.3 ~ 129 mm	4.3 ~ 129 mm	4.3 ~ 129 mm	4.3 ~ 129 mm
	Horizontal Angle of View (HAoV)	2.3° to 65°	2.3° to 65°	2.3° to 65°	2.3° to 65°
	PTZ Zoom optical/digital	30x/16x	30x/16x	30x/16x	30x/16x
	Tilt angle	-90° to 0°	-90° to 0°	-90° to 0°	-90° to 0°
	DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	40-1275/16-506/8-255/4-128	60-1913/24-759/12-383/6-191	40-1275/16-506/8-255/4-128
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	2/1	2/1	2/1	2/1
	Audio in / out	■/■	■/■	■/■	■/■
	Hybrid / public view monitor	-/-	-/-	-/-	-/-
Housing	Weather rating	IP66 (pendant)/IP51 (in-ceiling)	IP66 (pendant)/IP51 (in-ceiling)	IP66	IP66
	Vandal resistant	IK10	IK10	-	-
	Operating temperature	-40° to 60° C (-40° to 140° F)	-40° to 60° C (-40° to 140° F)	-40° to 60° C (-40° to 140° F)	-40° to 60° C (-40° to 140° F)

## IP Video

### Moving Cameras

## ▶AUTODOME IP 7000



## ▶AUTODOME IP 7000 HD



## ▶AUTODOME IP starlight 7000 HD



## ▶AUTODOME IP starlight 7000 HD



■ Available – Not available

Commercial Type Number		VG5-7028/7036	VG5-7220	VG5-7130	VG5-7230
Bosch USPs	Intelligent Dynamic Noise Reduction	–	–	■	■
	Intelligent Auto Exposure / Intelligent Defog	–/–	–/–	–/■	–/■
	Intelligent Tracking	■	■	■	■
	starlight (extreme low-light sensitivity)	–	–	■	■
Video analytics at the edge	Essential Video Analytics	–	–	–	–
	Intelligent Video Analytics	■	■	■	■
Basic features	Maximum resolution	4CIF	HD 1080p	HD 720p	HD 1080p
	Image sensor type	1/4" CCD	1/2.8"	1/3" CMOS	1/2.8"
	Max. frames per second (fps)	30 fps@ 576p	60 fps@ 720p 30 fps@ 1080p	60 fps@ 720p	60 fps@ 720p 30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/■/–	■/■/–	■/■/–	■/■/–
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	92dB	86dB	90dB	120dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	–	–	–	–
	Power over Ethernet (PoE)	■ (HiPoE)	■ (HiPoE)	■ (HiPoE)	■ (HiPoE)
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams	■/4 streams
Privacy masking		■	■	■	■
Nbr of presets/guard tours		256/2	256/2	256/2	256/2
Wiper		–	–	–	–
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	■	■	■	■
	Audio detection	■	■	■	■
	PTZ Intelligent Tracking	■	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.66 lux (36x) 0.33 lux (28x)	0.06 lux	0.052 lux	0.0077 lux
	Minimum illumination night mode (black/white)	0.104 lux (36x) 0.066 lux (28x)	0.033 lux	0.0103 lux	0.0008 lux
	Night vision	–	–	■ (starlight)	■ (starlight)
	Max. range at night	–	–	–	–
Lens	Focal length	3.4 - 122.4 mm (x36) 3.5 - 98 mm (x28)	4.9 - 94 mm	4.3 - 129 mm	4.3 - 129 mm
	Horizontal Angle of View (HAoV)	28x : 2.13 to 54.98 36x : 1.7 to 56.35	3.3 to 59.5	2.3° to 59°	2.3° to 63.7°
	PTZ Zoom optical/digital	36x or 28x/12x	20x/12x	30x/12x	30x/12x
	Tilt angle	-90° to 14° (pendant)	-90° to 14° (pendant)	-90° to 14° (pendant)	-90° to 14° (pendant)
	DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	27-757/11-301/5-151/3-76 (28x) 26-949/10-377/5-190/3-95 (36x)	75-1517/30-602/15-303/8-152	45-1275/18-506/9-255/5-128
Storage	Memory card slot	■ (up to 32 GB/2 TB)	■ (up to 32 GB/2 TB)	■ (up to 2 TB)	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	7/4	7/4	7/4	7/4
	Audio in / out	■/■	■/■	■/■	■/■
	Hybrid / public view monitor	–/–	–/–	–/–	–/–
Housing	Weather rating	IP66 (outdoor)	IP66 (outdoor)	IP66 (outdoor)	IP66 (outdoor)
	Vandal resistant	IK08 (with rugged bubble)	IK10 (with rugged bubble)	–	–
	Operating temperature	-40° to 55° C (-40° F to 131° F)	-40° to 55° C (-40° F to 131° F)	-40° to 55° C (-40° F to 131° F)	-40° to 55° C (-40° F to 131° F)

## IP Video

### Moving Cameras

►MIC IP starlight 7000 HD



►MIC IP starlight 7000 HD



►MIC 612



■ Available – Not available

Commercial Type Number		MIC-7130-Px4xx	MIC-7230-x5	MIC612 **	
Bosch USPs	Intelligent Dynamic Noise Reduction	■	■	-	
	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	-/-	
	Intelligent Tracking	■	■	-	
	starlight (extreme low-light sensitivity)	■	■	-	
Video analytics at the edge	Essential Video Analytics	-	-	-	
	Intelligent Video Analytics	■	■	■	
Basic features	Maximum resolution	HD 720p	HD 1080p	550 TVL (optical) 320/640 (thermal)	
	Image sensor type	1/3"	1/2.8"	1/4" CCD/FPA	
	Max. frames per second (fps)	60 fps@ 720p	60 fps@ 720p 30 fps@1080p	30 fps@ 576p	
	Indoor / outdoor / in-vehicle	-/■/-	-/■/-	-/■/-	
	Day / night	■	■	■ (optical)	
	Wide Dynamic Range (WDR)	90dB	120dB@ 30fps 90dB@ 60fps	-	
	ONVIF conformant	■	■	■	
	Power over Ethernet (PoE)	■ (HiPoE)	■ (HiPoE)	-	
	Advanced features	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams	■/4 streams	■/4 streams
		Privacy masking	■	■	■
Nbr of presets/guard tours		256/2	256/2	99/2	
Wiper		■	■	■	
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	
	Built-in video analytics	■	■	■	
	Audio detection	■ (with VJC-7000-90)	■ (with VJC-7000-90)	-	
Sensitivity	PTZ Intelligent Tracking	■	■	-	
	Minimum illumination day mode (color)	0.052 lux	0.0077 lux	0.66 lux (optical) N.A. (thermal)	
	Minimum illumination night mode (black/white)	0.0103 lux	0.0008 lux	0.104 lux (optical) 0 lux (thermal)	
	Night vision	■ (optional illuminator)	■ (optional illuminator)	■ (thermal)	
Lens	Max. range at night	175 m (575 ft)	300 m (971 ft)	1500 m (4922 ft)	
	Focal length	4.3 - 129 mm	4.3 - 129 mm	3.4 - 122.4 mm (optical), 35 mm (thermal T models) 50 mm (thermal H models)	
	Horizontal Angle of View (HAoV)	2.1° to 58.3°	2.3° to 63.7°	1.7° to 57.8°	
	PTZ Zoom optical/digital	30x/12x	30x/12x	36x/12x	
	Tilt angle	-58° to 90° (upright), -90° to 90° (canted)	-58° to 90° (upright), -90° to 90° (canted)	-58° to 90°	
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	45-1396/18-554/9-279/4-139	62-1913/25-759/12-383/6-191	26-949/10-377/5-190/3-95 (optical)	
	Storage	Memory card slot	■ (up to 32 GB) (with VJC-7000-90)	■ (up to 32 GB) (with VJC-7000-90)	■ (up to 32 GB)
Cloud application storage		Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	
Connections	Alarm input / output	5/3 (with MIC-ALM-WAS-24)	5/3 (with MIC-ALM-WAS-24)	8/2 (optional card)	
	Audio in / out	■/■ (with VJC-7000-90)	■/■ (with VJC-7000-90)	■/■	
	Hybrid / public view monitor	■ (with external decoder)/-	■ (with external decoder)/-	■/-	
Housing	Weather rating	IP68	IP68	IP68	
	Vandal resistant	IK10	IK10	IK10	
	Operating temperature	-40° to 60° C (-40° to 140° F)	-40° to 60° C (-40° to 140° F)	-40° to 60° C (-40° F to 140° F)	

\*\* IP features are possible when using optional MIC-IP-PSU Power Supply

## IP Video

### Digital Recording

**All-in-one solution**
**►DIVAR IP 3000**
**►DIVAR IP 7000 2U**
**►DIVAR IP 7000 3U**


■ Available – Not available

Commercial Type Number		DIP-304x-xxx	DIP-718x-xxx	DIP-71Fx-xxx
Basic functions	Max. system size	32	128	128
	Integrated video management	■	■	■
	RAID Level	—	RAID-5, RAID-6	RAID-5, RAID-6
	Supported resolutions	CIF/2CIF/4CIF/720p/1080p/5MP	CIF/2CIF/4CIF/720p/1080p/5MP/UHD	CIF/2CIF/4CIF/720p/1080p/5MP/UHD
	Video compression	H.264, MPEG-4, ONVIF, RTSP, JPEG	H.264, MPEG-4, ONVIF, RTSP, JPEG	H.264, MPEG-4, ONVIF, RTSP, JPEG
	Transcoding	■	■	■
	ONVIF	■	■	■
Mechanical	Form factor	4-bay Mini-Tower	2U 19-inch Rack Mount	3U 19-inch Rack Mount
	Network connections (LAN)	1x Gigabit Ethernet	2x Gigabit Ethernet, 1x 100Mbit (Mgmt)	2x Gigabit Ethernet, 1x 100Mbit (Mgmt)
	USB ports	4x USB 2.0/1x USB 3.0	4x USB 2.0, 2x USB 3.0	4x USB 2.0, 2x USB 3.0
	Number of power supplies	1	2	2
	Power supplies hot swappable	—	■	■
Video output	Connector type	1 DVI, 1 VGA	4x mini-DP (one mini-DP to VGA adapter included)	4x mini-DP (one mini-DP to VGA adapter included)
	Spotmonitor	1 per IP decoder, 2nd video output (VGA)	3x via local mini-DP, 1 per IP decoder	3x via local mini-DP, 1 per IP decoder
Audio	In/out channels	32 (audio playback via remote station only)	128	128
	Compression type	G.726	G.726	G.726
	Synchronous audio	■	■	■
	Associate multiple cameras to 1 Audio	■	■	■
Recording	Video Recording Manager (VRM)	■	■	■
	Schedule recording modes	■	■	■
Storage options	Max. drives supported	4	8	16
	Available capacities per drive	2 TB	3, 4, 6 or 8 TB	3, 4, 6 or 8 TB
	Base system capacity TB	0, 4 or 8 TB	0, 12, 16, 24, 32, 48 or 64 TB	0, 48, 64, 96 or 128 TB
	Max. Base system capacity TB	8 TB	64 TB	128 TB
	Full system capacity TB	24 TB	576 TB	640 TB
	Extensible/external support	iSCSI	iSCSI	iSCSI
Storage extensions	Max. number of units	2x DIVAR IP 2000 or DIVAR IP 5000	4x DIVAR IP 6000	4x DIVAR IP 6000
	Maximum drives supported	4	4, 6 or 8	16
	Available capacities per drive	2 TB	3, 4, 6 or 8 TB	3, 4, 6 or 8 TB
	Hot swappable	—	■	■
Export/back-up of data	Data format	native, MOV, ASF	native, MOV, ASF	native, MOV, ASF
	Built-in DVD writer	—	■	■
	Supported devices	External CD/DVD Writer, USB 2.0, USB 3.0, iSCSI	USB 2.0, USB 3.0, iSCSI, internal CD/DVD Writer	USB 2.0, USB 3.0, iSCSI, internal CD/DVD Writer
	Back-up mode	Manual or Automatic	Manual or Automatic	Manual or Automatic

Table continued on the next page



## IP Video

### Digital Recording

All-in-one solution  
►DIVAR IP 3000

►DIVAR IP 7000 2U

►DIVAR IP 7000 3U



■ Available – Not available

Commercial Type Number		DIP-304x-xxx	DIP-718x-xxx	DIP-71Fx-xxx
Redundancy	Power supply redundancy	—	■	■
	Hot swappable HDD	—	■	■
Software options	PTZ control	■	■	■
	CCTV keyboard support	■	■	■
	Admin control	■	■	■
	Export options	■	■	■
Remote access	Mobile device (smart phone/tablet)	■ Video security app	■ Video security app	■ Video security app
	Network	10/100/1000 Ethernet	10/100/1000 Ethernet	10/100/1000 Ethernet
	Web browser access	■	■	■
	Simultaneous accessible users	—	4	4
Advanced features support	Forensic search support (metadata)	■	■	■
	Webclient	■	■	■
Supported software	Bosch Video Client	■ (v1.5 or newer)	■ (v1.5 or newer)	■ (v1.5 or newer)
	Bosch Video Management System	■ (v4.50 or newer)	■ (v6.0 or newer)	■ (v6.0 or newer)
	3rd Party software	—	—	—
3rd party integration tools	Optional ATM/POS integration	■	■	■
	SDK (IPP)	■	■	■

## IP Video Digital Storage

### Network Video Recorder

►DIVAR IP 5000

►DIVAR IP 6000 2U

►DIVAR IP 6000 3U

►DSA E-Series



■ Available – Not available

Commercial Type Number		DIP-504xxx-xxx	DIP-618x-xxx	DIP-61Fx-xxx	DSA-Nxxxxx-xxxx
Basic functions	Max. system size	32	128	128	600
	Integrated video management	—	—	—	—
	RAID Level	RAID-1	RAID-5, RAID-6	RAID-5, RAID-6	RAID-5/RAID-6
	Supported resolutions	CIF/2CIF/4CIF/720p/1080p/5MP	CIF/2CIF/4CIF/720p/1080p/5MP/UHD	CIF/2CIF/4CIF/720p/1080p/5MP/UHD	CIF/2CIF/4CIF/720p/1080p/5MP
	Video compression	H.264, MPEG-4, ONVIF, RTSP, JPEG	H.264, MPEG-4, ONVIF, RTSP, JPEG	H.264, MPEG-4, ONVIF, RTSP, JPEG	H.264, MPEG-4, ONVIF, RTSP, JPEG
	Transcoding	■	■	■	—
	ONVIF	■	■	■	■
Mechanical	Form factor	4-bay Mini-Tower	2U 19-inch Rack Mount	3U 19-inch Rack Mount	2U 19-inch Rack Mount
	Network connections (LAN)	2x Gigabit Ethernet	2x Gigabit Ethernet, 1x 100Mbit (Mgmt)	2x Gigabit Ethernet, 1x 100Mbit (Mgmt)	2x Gigabit Ethernet/ 2x 10 Gigabit Ethernet
	USB ports	4x USB 3.0	4x USB 2.0, 2x USB 3.0	4x USB 2.0, 2x USB 3.0	—
	Number of power supplies	1	2	2	2
	Power supplies hot swappable	—	■	■	■
Video output	Connector type	—	VGA	VGA	—
	Spotmonitor	—	1 per IP decoder	1 per IP decoder	—
Audio	In/out channels	32 (audio playback via remote station only)	128 (audio playback via remote station only)	128 (audio playback via remote station only)	800 (audio playback via remote station only)
	Compression type	G.726	G.726	G.726	G.726
	Synchronous audio	■	■	■	■
	Associate multiple cameras to 1 Audio	■	■	■	■
Recording	Video Recording Manager (VRM)	■	■ (VRM ready)	■ (VRM ready)	—
	Schedule recording modes	■	■	■	■
Storage options	Max. drives supported	4	8	16	12
	Available capacities per drive	2 or 4 TB	3, 4, 6 or 8 TB	3, 4, 6 or 8 TB	4, 6 or 8 TB
	Base system capacity TB	0, 4, 8 or 16 TB	0, 12, 16, 24, 32, 48 or 64 TB	0, 48, 64, 96 or 128 TB	—
	Max. Base system capacity TB	16 TB	64 TB	128 TB	48/72/96 TB
	Full system capacity TB	16 TB	576 TB	640 TB	384/768/1162 TB **
	Extenable/external support	iSCSI	iSCSI	iSCSI	6Gb/s SAS (Copper)
Storage extensions	Max. number of units	—	4x DIVAR IP 6000	4x DIVAR IP 6000	7/3 **
	Maximum drives supported	—	4, 6 or 8	16	12/60 **
	Available capacities per drive	—	3, 4, 6 or 8 TB	3, 4, 6 or 8 TB	4, 6 or 8 TB **
	Hot swappable	—	■	■	■
Export/back-up of data	Data format	MP4	WMF, Bosch ASF	WMF, Bosch ASF	WMF, Bosch ASF
	Built-in DVD writer	—	■	■	—
	Supported devices	Web download, FTP, Dropbox	USB 2.0, USB 3.0, iSCSI	USB 2.0, USB 3.0, iSCSI	External CD/DVD Writer, USB 2.0, iSCSI
	Back-up mode	manual	manual	manual	manual or automatic
Redundancy	Power supply redundancy	—	■	■	■
	Hot swappable HDD	—	■	■	■

Table continued on the next page

## IP Video

### Digital Storage

#### Network Video Recorder

►DIVAR IP 5000

►DIVAR IP 6000 2U

►DIVAR IP 6000 3U

►DSA E-Series



■ Available – Not available

Commercial Type Number		DIP-504x-xxx	DIP-618x-xxx	DIP-61Fx-xxx	DSA-Nxxxxx-xxx
Software options	PTZ control	○ *	○ *	○ *	—
	CCTV keyboard support	○ *	○ *	○ *	—
	Admin control	○ *	○ *	○ *	—
	Export options	○ *	○ *	○ *	—
Remote access	Mobile device (smart phone/tablet)	■ Video security app	■ Video security app	■ Video security app	—
	Network	10/100/1000 Ethernet	10/100/1000 Ethernet	10/100/1000 Ethernet	2x 10 Gigabit Ethernet
	Web browser access	■	■	■	—
Advanced features support	Simultaneous accessible users	5	5	5	—
	Forensic search support (metadata)	■	■	■	—
	Webclient	■	—	—	SANtricity
Supported software	Bosch Video Client	■	■	■	—
	Bosch Video Management System	■ (v2.20 or newer)	■ (v6.0 or newer)	■ (v6.0 or newer)	—
	3rd Party software	via RTSP	—	—	—
3rd party integration tools	Optional ATM/POS integration	—	—	—	—
	SDK (IPP)	■	—	—	—

○ \* Via Bosch video software

\*\* Up to three high-density shelf expansion units (60 x 8 TB HDD per expansion shelf) to one Dual controller base unit may be connected - CTN:DSA-N2C7X6-12AT

## IP Video

### Digital Storage

#### Network Video Recorder

►DIVAR network 2000      ►DIVAR network 3000      ►DIVAR network 5000



■ Available – Not available

Commercial Type Number		DDN-2516-xxxxxx	DDN-3532-xxxxxx	DRN-5532-xxxxxx
Basic functions	Max. system size	16	32	32
	Alarm Inputs/Outputs	4 / 2	4 / 2	16 / 6
	RAID Level	—	—	RAID-1, RAID-5
	Supported resolutions	up to 8MP	up to 12MP	up to 12MP
	Video compression	H.264, MPEG-4	H.264, MPEG-4	H.264, MPEG-4
	Transcoding	—	—	—
	ONVIF	■	■	■
Mechanical	Form factor	1U high Desktop	1U high Desktop	1.5U high Rack Mount
	Network connections (LAN)	2x Gigabit Ethernet	2x Gigabit Ethernet	2x Gigabit Ethernet
	Build-in PoE+	0, 8 or 16 PoE+	0 or 16 PoE+	0 or 16 PoE+
	USB ports	1x USB 2.0, 1xUSB 3.0	1x USB 2.0, 1xUSB 3.0	1x USB 2.0, 2xUSB 3.0
Video output	Connector type	VGA, HDMI	VGA, HDMI	VGA, HDMI
	Spotmonitor	—	—	■ (HDMI)
Audio	In/out channels	16 in * / 1 out	32 in * / 1 out	32 in * / 1 out
	Compression type	G.726	G.726	G.726
	Synchronous audio	■	■	■
	Associate multiple cameras to 1 Audio	—	—	—
Storage options	Max. drives supported	2	2	4
	Available capacities per drive	1, 2, 3, 4 or 6TB	1, 2, 3, 4 or 6TB	1, 2, 3, 4 or 6TB
	Base system capacity TB	0, 2 TB	0, 2 TB	0, 4 TB
	Max. Base system capacity TB	12 TB	12 TB	24 TB
	Full system capacity TB	12 TB	12 TB	24 TB
	Extensible/external support	—	—	eSATA
Storage extentions	Max. number of units	—	—	1
	Maximum drives supported	—	—	1
	Available capacities per drive	1, 2, 3, 4 or 6TB	1, 2, 3, 4 or 6TB	1, 2, 3, 4 or 6TB
	Hot swappable	—	—	—
Export/back-up of data	Data format	native, ASF	native, ASF	native, ASF
	Built-in DVD writer	■ (optional)	■ (optional)	■ (optional)
	Supported devices	USB 2.0, USB 3.0, internal DVD Writer	USB 2.0, USB 3.0, internal DVD Writer	USB 2.0, USB 3.0, eSata, internal DVD Writer
	Back-up mode	manual or automatic	manual or automatic	manual or automatic
Redundancy	Power supply redundancy	—	—	—
	Hot swappable HDD	—	—	—
Software options	PTZ control	■	■	■
	CCTV keyboard support	—	—	■
	Admin control	■	■	■
	Export options	■	■	■

Table continued on the next page

## IP Video

### Digital Storage

#### Network Video Recorder

►DIVAR network 2000      ►DIVAR network 3000      ►DIVAR network 5000



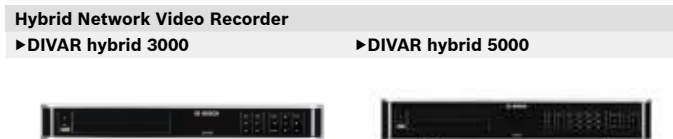
■ Available – Not available

Commercial Type Number		DDN-2516-xxxxxx	DDN-3532-xxxxxx	DRN-5532-xxxxxx
Remote access	Mobile device (smart phone)	■ Mobile Viewer app	■ Mobile Viewer app	■ Mobile Viewer app
	Network	10/100/1000 Ethernet	10/100/1000 Ethernet	10/100/1000 Ethernet
	Web browser access	■	■	■
	Simultaneous accessible users	128 (4 advised)	128 (4 advised)	128 (4 advised)
Advanced features support	Forensic search support (metadata)	—	—	—
	Webclient	■	■	■
Supported software	Bosch Video Client	■ *	■ *	■ *
	Bosch Video Management System	■ *	■ *	■ *
	3rd Party software	—	—	—
3rd party integration tools	Optional ATM/POS integration	—	—	—
	SDK (IPP)	—	—	—
	Bosch Video Management System	■ *	■ *	■ *
	3rd Party software	—	—	—
3rd party integration tools	Optional ATM/POS integration	—	—	—
	SDK (IPP)	—	—	—

\* Not available in first release

## IP Video

### Digital Storage



■ Available – Not available

Commercial Type Number		DDH-3532-xxxx00	DRH-5532-xxxxxx
Basic functions	Max. system size	16 analog + 16IP or 32IP	16 analog + 16IP or 32IP
	Looping AN Video	—	■
	Alarm Inputs/Outputs	16 / 4	16 / 4
	RAID Level	—	RAID-1, RAID-5
	Supported resolutions IP cameras	up to 12MP	up to 12MP
	Supported resolutions AN cameras	up to 960H	up to 960H
	Video compression	H.264, MPEG-4	H.264, MPEG-4
Mechanical	Transcoding	—	—
	ONVIF	■	■
	Form factor	1U high Desktop	1.5U high Rack Mount
	Network connections (LAN)	2x Gigabit Ethernet	2x Gigabit Ethernet
	Build-in PoE+	—	—
Video output	USB ports	1x USB 2.0, 2xUSB 3.0	1x USB 2.0, 2xUSB 3.0
	Connector type	VGA, HDMI	VGA, HDMI
Audio	Spotmonitor	■ (HDMI)	■ (HDMI)
	In/out channels IP cameras	32 in	32 in
	Compression type IP camera	G.726	G.726
	In/out channels recorder	4 in / 1 out	4 in / 1 out
	Compression type recorder	G711a	G711a
	Synchronous audio	■	■
Storage options	Associate multiple cameras to 1 Audio	—	—
	Max. drives supported	2	4
	Available capacities per drive	1, 2, 3, 4 or 6TB	1, 2, 3, 4 or 6TB
	Base system capacity TB	0, 2 TB	0, 4 TB
	Max. Base system capacity TB	12 TB	24 TB
	Full system capacity TB	12 TB	24 TB
Storage extentions	Extenable/external support	—	eSATA
	Max. number of units	—	1
	Maximum drives supported	—	1
	Available capacities per drive	1, 2, 3, 4 or 6TB	1, 2, 3, 4 or 6TB
Export/back-up of data	Hot swappable	—	—
	Data format	native, ASF	native, ASF
	Built-in DVD writer	■ (optional)	■ (optional)
	Supported devices	USB 2.0, USB 3.0, internal DVD Writer	USB 2.0, USB 3.0, eSata, internal DVD Writer
	Back-up mode	manual or automatic	manual or automatic

## IP Video

### Digital Storage

#### Hybrid Network Video Recorder

►DIVAR hybrid 3000      ►DIVAR hybrid 5000



■ Available – Not available

Commercial Type Number		DDH-3532-xxxx00	DRH-5532-xxxxxx
Redundancy	Power supply redundancy	—	—
	Hot swappable HDD	—	—
Software options	PTZ control	■	■
	CCTV keyboard support	—	—
Remote access	Admin control	■	■
	Export options	■	■
	Mobile device (smart phone)	■ Mobile Viewer app	■ Mobile Viewer app
	Network	10/100/1000 Ethernet	10/100/1000 Ethernet
Advanced features support	Web browser access	■	■
	Simultaneous accessible users	128 (4 advised)	128 (4 advised)
	Forensic search support (metadata)	—	—
Supported software	Webclient	■	■
	Bosch Video Client	■	■
	Bosch Video Management System	■	■
3rd party integration tools	3rd Party software	—	—
	Optional ATM/POS integration	—	—
	SDK (IPP)	—	—



## IP Video

### Video Software

#### ►Video Management System



■ Available – Not available

Commercial Type Number		BVMS (v7.0) Lite	BVMS (v7.0) Pro
	Channel Count	32 to 64	8 to 200,000
	System Architecture Support	Standalone to Client Server	Client Server (one server/2000 cameras) Multi Server (up to 30 servers/10,000 cameras) Multi-System (unlimited servers/cameras)
	Full VMS	Full VMS	Full VMS
	Software based Video IP Platform	■	■
	ONVIF for 3rd Party Camera Intergration	■	■
	Multi-site Support (independent systems tied together)	■	■
	Multi-site Support (dispersed system recording, cameras, remote independent client)	■	■
	Mobile Clients	■ MVS license required: 1 license provides up to 20 connections. Multiple servers with MVS	■ MVS license required: 1 license provides up to 20 connections. Multiple servers with MVS per site
	Workstations/Clients	2 clients for 32, 4 clients for 64	100 (Client-Server and Multi-Server), Unlimited (Multi-System)
	LDAP	■	■
	COTS (Commercial off the Shelf) for Server/Workstation	■	■
Resolution	HD-ready	■	■
	SD and HD	■	■
	SD and HD Decoder support	■	■
	Monitor Wall Client GUI Support	■	■
	4K ultra HD support	■	■
Encoding	H.264	■	■
	MPEG-4	■ (via BRS only)	■ (via BRS only)
	3rd party camera support	■ ONVIF 1.02/Profile-S/RTSP and MJPEG	■ ONVIF 1.02/Profile-S/RTSP and MJPEG
Display	Multi-monitor support	■ (4)	■ (4)
	Workstation OS support	Win8.1, Win10	Win8.1, Win10
	16:9 Monitor support	■	■
	Mapping	■	■
	Dynamic cameo scaling	—	—
	Client dewarping	■	■

Table continued on the next page

# IP Video

## Video Software

### ▶Video Management System



■ Available – Not available

Commercial Type Number		BVMS (v7.0) Lite	BVMS (v7.0) Pro
Alarm Management	User management	■	■
	Digital I/O alarms	■	■
	System event alarms	■	■
	Motion alarms	■	■
	Event response and command scripts	■	■
	IVA alarms	■	■
	IVA forensic search	■	■
	Audio	■	■
	Compound events	■	■
	Scheduled dependent alarming	■	■
	Event allocation to user groups	■	■
Control	AUTODOME Intelligent Tracking	■	■
	PTZ	■	■
	IntuiKey	■	■
Storage	Virtual matrix	■	■
	@edge camera support	■	■
	iSCSI	■	■
	NVR support	■ (BRS)	■ (BRS)
	VRM	■	■
	IVA metadata	■	■
	Support redundant storage	—	■
Integration	DLA Support (Maximum count of VRM servers)	■ (5)	■ (125)
	BVMS	—	—
	BRS	■	■
	DxR 400/600/700	■	■
	BVC	—	—
	Bosch intrusion panel	■ (GV4 and B-series)	■ (GV4 and B-series)
	Access	—	—
	OPC	■	■
	CLI/CCL	■	■
	ATM/POS	■	■
	BIS	■	■
	Script control for all system functions	■	■
	SDK integration into 3rd party SW	■	■
	Virtual inputs	■	■
	Barco Transform N series	■	■
Networking	LAN/intranet	■	■
	WAN	■	■
	Remote/Decoupled Client	■	■
	Mobile Viewing APP	■ (iOS only)	■ (iOS only)
	Web Client	■	■

## IP Video Viewing Software

## ▶Video Security App

## ▶Video Security Client

## ▶Advanced Viewing Client



■ Available – Not available

Name		Video Security App	Video Security Client	Bosch Video Client (BVC)
	No. of channels	16	Up to 16	32 per site
	Usage situation	Mobile	PC and Mobile	PC
	Workstation OS support	iOS, Android	Win7, Win8.1, Win10	Win7, Win8.1, Win10
	Software based Video IP Platform	■	■	■
	Multi-site Support (independent systems tied together)	—	—	—
	Multi-site Support (dispersed system recording, cameras, remote independent client)	—	—	—
Key technologies supported	Dynamic Transcoding	■	■	■
	IVA	■	■	■
	Client side dewarping (panoramic)	■	■	■
	4K ultra HD starlight	■	■	■
Encoding	H.264	■	■	■
	MPEG-4	■	■	■
	3rd party camera support	■ (with VSG)	■ (with VSG)	ONVIF 1.02/Profile-S with DIVAR IP
Viewing	Multi-monitor support	—	—	■ (2)
	Workstation OS support	iOS	Win7, Win8	XP, Vista, Win7, SP1
	16:9 monitor support	n/a	■	■
	Viewing frequency	—	—	—
Alarm Management	Dynamic cameo scaling	■	■	■
	User management	—	—	—
	Digital I/O alarms	—	—	■
	System event alarms	—	—	■
	Motion alarms	—	—	■
	Event response and command scripts	—	—	—
	IVA alarms	—	—	■
	IVA forensic search	■ (limited functionality)	■ (limited functionality)	■
	Audio	—	—	■
	Compound events	—	—	—
	Scheduled dependent alarming	—	—	—
	Event allocation to user groups	—	—	—
Control	AUTODOME Intelligent Tracking	■	■	■
	PTZ	■	■	■
	IntuiKey	—	—	■ (limited functionality)
	Virtual matrix	—	—	—
Storage	@edge camera support	■	■	■
	iSCSI	■	■	■
	NVR support	—	—	—
	VRM	■	■	■ (via DIVAR IP)
	IVA metadata	■	■	■
	Support redundant storage	—	—	—
Integration	DLA Support (VRM Mode)	■	■	■ (1)
	BRS	—	—	—
	DxR 400/600/700	—	—	■
	Virtual inputs	—	—	■

# IP Video

## Encoders and Decoders

**Encoders**      **Decoders**

▶VIP X1XF E      ▶VIP X1XF      ▶VIDEOJET X20 XF E      ▶VIDEOJET X40 XF E      ▶VIDEOJET multi 4000      ▶VIDEOJET decoder 3000      ▶VIDEOJET decoder 8000



■ Available – Not available

Commercial Type Number	VIP-X1XF-E	VIP-X1XF	VJT-X20XF-E	VJT-X40XF-E	VJM-4016	VJD-3000	VJD-8000
Description	Single Channel Video Encoder	Single Channel Premium Encoder	2 Channel H.264 Video Encoder	4 Channel H.264 Video Encoder	16 Channel H.264 Video Encoder	Single/Quad-stream Decoder	4K UHD and MP Video Decoder
Video/Audio							
Camera Inputs	1	1	2	4	16	—	—
Monitor Outputs	—	—	—	—	—	1 of 2 (HDMI, CVBS)	2 (mini DP)
Video Codec	H.264	H.264	H.264 MP H.264 BP	H.264 MP H.264 BP	H.264 High Profile	H.264 M-JPEG, JPEG	H.264, MPEG-4
Max. frames per second (fps)	25/30@4CIF	25/30@4CIF	25/30	25/30	25/30@4CIF	30@1080p (single view) 60@720p (single view) 4x 25/30@4CIF (quad view)	2x 20@12MP 2x 30@4K 4x 60@1080p 6x 30@1080p 8x 60@720p
Audio in / out	1/1	1/1	2/1	2/1	2/1	1/1	0/1 (via DP)
Transcoding at the edge	—	—	■	■	—	—	—
Storage							
Type	SD Card	SD Card	CF	CF	—	—	—
Capacity	2 TB	2 TB	2 TB	2 TB	—	—	—
Intelligence							
Direct-to-iSCSI	■	■	■	■	■	—	—
Video Analytics	Motion+	IVA	Motion+	Motion+	Motion+	—	—
Interfaces							
Alarm In	1	2	4	4	4	4	—
Relay Out	1	2	1	1	1	1	—
ONVIF conformant	■	■	■	■	■	—	—
Other							
Keyboard	—	—	—	—	—	■	—
IP Matrix	—	—	—	—	—	■	—

▶Modular Systems



■ Available – Not available

Commercial Type Number	VIP X1600-B	VIP X1600-XFB
Description	Base System	Base System
Bays	4	4
Ethernet	Two 1 Gbps ports (1 front, 1 rear)	Three 1 Gbps ports (2 front, 1 rear)
SFP Fiber Slot	—	■



■ Available – Not available

Commercial Type Number	VIP X1600 XFM4A	VIP X1600 XFM4B
Description	4 Channel H.264 Encoder Module	4 Channel H.264 Encoder Module with Bilinix
Video/Audio		
Camera Inputs	4	4
Video Codec	H.264 MP H.264 BP+ M-JPEG	H.264 MP H.264 BP+ M-JPEG
Max. frames per second (fps)	25/30@4CIF	25/30@4CIF
Audio in / out	2/1	2/1
Intelligence		
Direct-to-iSCSI	■	■
Video Analytics	IVA	IVA
Interfaces		
Alarm In	4	4
Relay Out	1	1
SFP Fiber Slot	■	■
ONVIF conformant	■	■

## IP Video

### Transcoders

Transcoders  
▶VIDEOJET XTC XF



Transcoder/network & alarm interface device  
▶VIDEOJET connect 7000



■ Available – Not available

Commercial Type Number		VJT-XTCXF	VJC-7000-90
	Description	4 Channel/Dual-stream Transcoder	5 Channel network switch/Single-stream Transcoder
Video/Audio	Camera Inputs	4	4
	Video Codec	H.264 High Profile	H.264 High Profile
	Max. frames per second (fps)	25/30@4CIF	25/30@4CIF
	Audio in / out	—	1/—
	Transcoding at the edge	■	■
Storage	Type	CF	CF
	Capacity	2 TB	2 TB
Intelligence	Direct-to-iSCSI	—	—
	Video Analytics	—	—
Interfaces	Alarm In	4	4 dry contacts, 2 monitored tamper alarm (With MIC IP 7000)
	Alarm Out	1	3
	Relay Out	—	1 (for washer pump) (with MIC IP 7000)
	Network (PoE)	—	1x 10/100/1000Base-TX
	Network UTP	—	2x 10/100/1000Base-TX
	Network fiber	—	2 SFP Sockets (1000Base-FX)
	Network daisy chain	—	■ (up to 50)
	Output power	—	95W HiPoe
Other	Washer pump control	—	■ (relay)
	Support for daisy-chaining of multiple cameras	—	■

# IP Video

## Flat Panel Monitors



■ Available – Not available

Commercial Type Number		UML-193-90	UML-223-90	UML-273-90	UML-323-90	UML-423-90	UML-553-90
Display	Type	19" LED	22" LED	27" LED	32" LED	42" LED	55" LED
	Max Pixel Resolution	1366 x 768	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	Horizontal Resolution	650 TVL	650 TVL	650 TVL	650 TVL	650 TVL	650 TVL
	Aspect Ratio	16:9	16:9	16:9	16:9	16:9	16:9
	Brightness (cd/m <sup>2</sup> )	250	250	300	350	500	450
	Contrast Ratio	1000:1	1000:1	3000:1	3000:1	4000:1	4000:1
	Backlight	30,000 hours	30,000 hours	30,000 hours	50,000 hours	50,000 hours	50,000 hours
	Viewing Angle (HxV)	170° x 160°	170° x 160°	178° x 178°	178° x 178°	178° x 178°	178° x 178°
Composite Video/Audio Loop-through		passive	passive	passive	passive	passive	passive
PC Compatible		■	■	■	■	■	■
Connectors	Composite Video (BNC)	–	–	2 (looping video)	2 (looping video)	2 (looping video)	2 (looping video)
	VGA	■	■	■	■	■	■
	DVI-D	■	■	■	■	■	■
	HDMI	■	■	■	■	■	■
Audio	Input	■	■	■	■	■	■
	Speaker	■	■	■	■	■	■
Mechanical	Width	448 mm	515 mm	642 mm	745 mm	977 mm	1256 mm
	Height	332 mm*	370 mm*	380 mm	440 mm	570 mm	727 mm
	Depth	182 mm*	182 mm*	76 mm	77 mm	83 mm	83 mm
	Weight	3.0 kg	3.6 kg	9.1 kg	12.5 kg	20 kg	32 kg
Power	Power Supply	integrated	integrated	included	integrated	integrated	integrated
	Power Consumption	42W	42W	75W	75W	150W	170W
Misc.	Picture-in-picture	–	–	–	–	–	–
	Front Panel Lockout	■	■	■	■	■	■
	IR Remote	–	–	–	■	■	■
Cables Included	VGA-to-VGA	■	■	■	■	■	■
	DVI-to-DVI	■	■	■	■	■	■
Mounting	VESA Compliant	■	■	■	■	■	■
	Rack-mountable	–	–	–	–	–	–
	Table Stand	included	included	included	UMM-LED32-SD	UMM-LED42-SD	UMM-LED42-SD
	Fixed Wall Mount	–	–	–	–	ST650	ST650
	Swivel/Tilt Wall Mount	–	–	UMM-WMT-32	UMM-WMT-32	–	–

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