



BOSCH

Invented for life

IP Video product overview

April 2018

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Video systems

Rethink video security

At Bosch we are dedicated to innovating security where you need it most. We constantly push the boundaries of technology to develop intelligent solutions that go beyond the highest security demands of today and deliver clear business advantages beyond security. We believe that the logical next-step for security is to enable customers to interpret the data to start repurposing these huge amounts of video data. The ability to interpret video data directly at source helps to substantially improve levels of security, as well as offering clear business advantages.



Utilize the hidden potential

Despite the huge amounts of video data collected, statistics say that only 10% of data is ever used and most of the data collected loses its value within seconds of being generated. Why are we only using such a limited amount of data? We are mainly focused on delivering the right

information in case of an emergency or providing the correct evidence after a criminal act.

We believe that the future is to utilize the hidden potential and use 100% of the video security data. Allowing this data to do far more for businesses than security alone.



Video analytics at the edge

So what about the hidden potential of that unused data? Wouldn't it be great to enable captured video data to do more for businesses than security alone? With built-in video analytics as standard, we enable customers to interpret data directly at the source, to re-assign it to help them make smarter business decisions. Anything from monitoring presence to reduce utility bills, to identifying patterns in customer activity to improve sales by recognizing 'hot spots' in retail environments. Or distinguishing 'road blocks' to optimize shop layout to increase customer satisfaction.

Areas of expertise

Before we can rethink video security we need to ensure that excellence in video security and data management is given. This is why our intelligent portfolio is built around our areas of expertise. Delivering highest quality of relevant images, most efficient bitrates with lowest storage requirements and network strain, and keeping video data secure.

Highest image quality

Bosch delivers the highest quality images with technologies such as resolutions up to 4K ultra HD, starlight technology and excellent dynamic ranges.



Intelligent bitrate management

Bosch helps to reduce bitrate by up to 80% and substantially lower network strain and storage requirements without compromising video quality.



Data security

Bosch video security solutions offer various software and hardware measures, such as a built-in Trusted Platform Module, to keep video data secure.



All 'i' cameras have built-in intelligence

The new range of 'i' cameras feature

- ▶ Built-in intelligence
- ▶ Latest high performance camera platform offering:



Highest image quality



Latest data Security measures



Bitrate reduction ≤80%



Future-proof solution With H.265

Essential Video Analytics

- ▶ Business intelligence
- ▶ Advanced intrusion detection
- ▶ Quick retrieval of data
- ▶ Alerts when needed



People counting



Queueing alarm



Enforcing health and safety regulations

Intelligent Video Analytics

- ▶ Analysis over large distances
- ▶ Resistant against shaking
- ▶ Extreme weather
- ▶ Intelligent Tracking



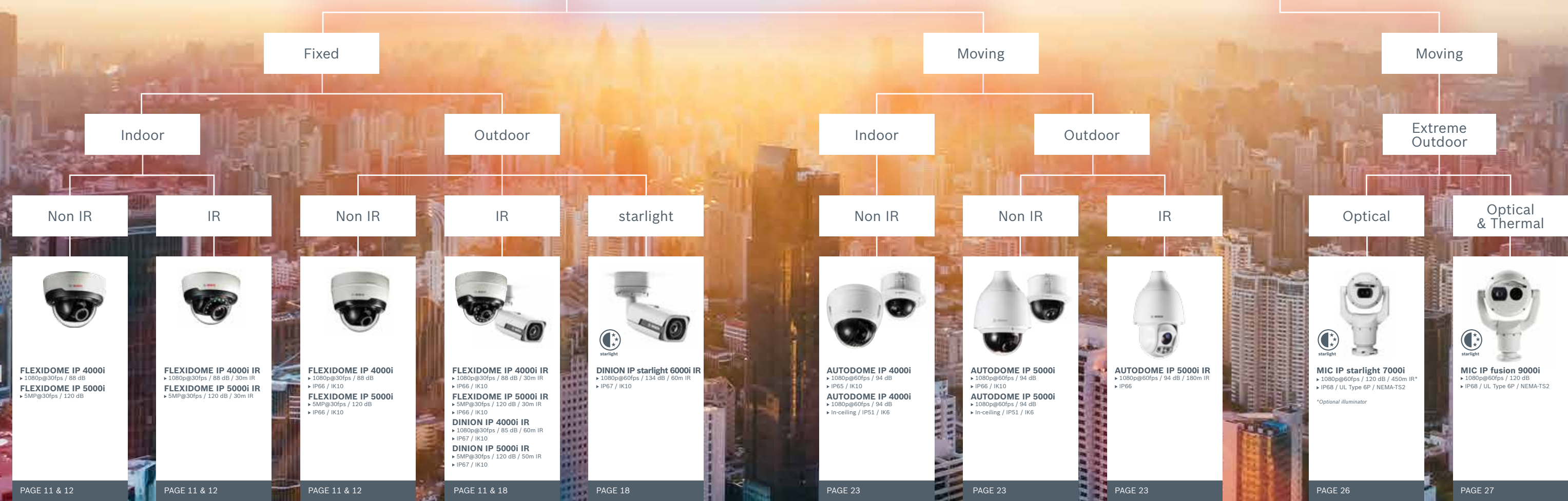
Reliable alerts, even in extreme weather conditions



Video Analytics extremely resistant against shaking



Video content analysis over large distances



Essential Video Analytics



Essential Video Analytics is the ideal analytics solution for small and medium businesses, large retail stores, commercial buildings, warehouses and logistics depots. It can be used for advanced intrusion detection (such as loitering alarms and identifying a person or object entering a pre-defined field), enforcing health and safety regulations such as no-parking zones, detecting blocked emergency exits or objects that have been left behind, and analyzing behavior in retail environments.

Intelligent Video Analytics

Intelligent Video Analytics offers the ultimate in built-in video analytics and is specifically designed for the most demanding environments. This state-of-the-art solution is ideal for mission-critical applications like perimeter protection of airports, critical infrastructures and government buildings, border patrol and traffic monitoring (e.g. wrong-way detection, traffic counts, and parked cars). Intelligent Video Analytics can do everything that Essential Video Analytics does.

It also has the unique ability to perform video content analysis over large distances and differentiate between genuine security events and known false triggers such as snow, wind (moving trees), rain, hail, and water reflections that can make video data more difficult to interpret. Cameras with Intelligent Video Analytics are also extremely resistant against shaking caused by punishing winds, city traffic or bicycles parked against the camera pole.



IP Video

Dome Cameras

►FLEXIDOME IP micro 5000



■ Available – Not available

Commercial Type Number	NUC-51022-FX	NUC-51051-FX
Video analytics at the edge	Essential Video Analytics	-
	Intelligent Video Analytics	-
Bitrate management	Intelligent Dynamic Noise Reduction	■
	Intelligent streaming	-
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams
Basic features	Maximum resolution	HD 1080p
	Image sensor type	1/2.7"
	Max. frames per second (fps)	30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/■/-
	Day / night	■ (electronic)
	Wide Dynamic Range (WDR)	76dB
	ONVIF conformant	■
	Built-in microphone	-
	Intelligent Auto Exposure / Intelligent Defog	-/-
	Privacy masking	■
Alarm triggering	Region Of Interest tracking	-
	Tamper detection / Video motion detection	■/■
	Built-in video analytics	-
Sensitivity	Audio detection	-
	Minimum illumination day mode (color)	0.4 lux (F4) 1 lux (F2)
	Minimum illumination night mode (black/white)	-
Lens	Night vision	-
	Max. range at night	-
	Automatic Back Focus (ABF)	-
DORI distances	Automatic varifocal	-
	Focal length	3.6 mm (F4) 2.5 mm (F2)
	Horizontal Angle of View (HAoV)	97° (F4) 135° (F2)
Storage	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	34/13/7/3 (F4) 16/6/3/2 (F2)
	Memory card slot	■ (up to 2 TB)
Connections	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
	Alarm input / output	-/-
	Audio in / out	-
Housing	Hybrid / public view monitor	-/■
	Weather rating	IP66
	Vandal resistant	IK08
Power input voltage	Operating temperature	-30° to 50° C (-22° to 122° F)
	Power over Ethernet/12V/24V	■/-/-

IP Video

Dome Cameras

►FLEXIDOME IP outdoor 4000 HD



■ Available – Not available

Commercial Type Number	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)
	Image sensor type	1/2.7"
	Max. frames per second (fps)	30 fps@ 720p
	Indoor / outdoor / in-vehicle	■/■/-
	Day / night	■
	Wide Dynamic Range (WDR)	76dB
	ONVIF conformant	■
	Built-in microphone	-
	Power over Ethernet (PoE)	■
	Compression (H.264 & MJPEG)/multi-streaming	■/4 streams
Advanced features	Privacy masking	■
	Region Of Interest tracking	-
	Tamper detection / Video motion detection	■/■
Alarm triggering	Built-in video analytics	-
	Audio detection	■
	Minimum illumination day mode (color)	0.24 lux
Sensitivity	Minimum illumination night mode (black/white)	0.05 lux
	Night vision	-
	Max. range at night	-
Lens	Automatic Back Focus (ABF)	-
	Automatic varifocal	-
	Focal length	3.3 - 10 mm
DORI distances	Horizontal Angle of View (HAoV)	35.3° - 105.5°
	Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard)	16-79/6-31/3-16/2-8
Storage	Memory card slot	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	1/1
	Audio in / out	■/■
	Hybrid* / confrontation monitor	■/■
Housing	Weather rating	IP66
	Vandal resistant	IK10
	Operating temperature	-40° to 50° C (-22° to 122° F)

IP Video Dome Cameras

►FLEXIDOME IP outdoor 5000 IR ►FLEXIDOME IP outdoor 5000 HD ►FLEXIDOME IP indoor 5000 IR ►FLEXIDOME IP indoor 5000 HD



■ Available – Not available

Commercial Type Number	NDI-50022-A3	NDN-50022-A3	NII-50022-A3	NIN-50022-A3
Video analytics at the edge	Essential Video Analytics	-	-	-
	Intelligent Video Analytics	-	-	-
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	■
	Intelligent streaming	■	■	■
Basic features	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams	-/■/4 streams
	Maximum resolution	HD 1080p	HD 1080p	HD 1080p
	Image sensor type	1/2.7"	1/2.7"	1/2.7"
	Max. frames per second (fps)	30 fps @ 1080p	30 fps @ 1080p	30 fps @ 1080p
	Indoor / outdoor / in-vehicle	■/■/-	■/■/-	■/-/-
	Day / night	■	■	■
	Wide Dynamic Range (WDR)	76dB	76dB	76dB
	ONVIF conformant	■	■	■
	Built-in microphone	-	-	■
	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	-/■
Advanced features	Privacy masking	■	■	■
	Region Of Interest tracking	-	-	-
Alarm triggering	Tamper detection / Video motion detection	■	■	■
	Built-in video analytics	-	-	-
Sensitivity	Audio detection	■	■	■
	Minimum illumination day mode (color)	0.24 lux	0.24 lux	0.24 lux
	Minimum illumination night mode (black/white)	0 lux (IR on)	0.05 lux	0 lux (IR on)
	Night vision	■ (infrared)	-	■ (infrared)
Lens	Max. range at night	15 m (50 ft)	-	15 m (50 ft)
	Automatic Back Focus (ABF)	-	-	-
	Automatic varifocal	■	■	■
	Focal length	3 -10 mm	3 -10 mm	3 -10 mm
DORI distances	Horizontal Angle of View (HAoV)	36°-117°	36°-117°	36°-117°
	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	24-118/9-47/5-24/2-12
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	IP66	IP66	-
	Vandal resistant	IK10	IK10	IK04
	Operating temperature	-40° to 50° C (-22° to 122° F)	-40° to 50° C (-22° to 122° F)	-20° to 50° C (-4° to 122° F)
Power input voltage	Power over Ethernet/12V/24V	■/■/-	■/■/-	■/■/-

IP Video Dome Cameras

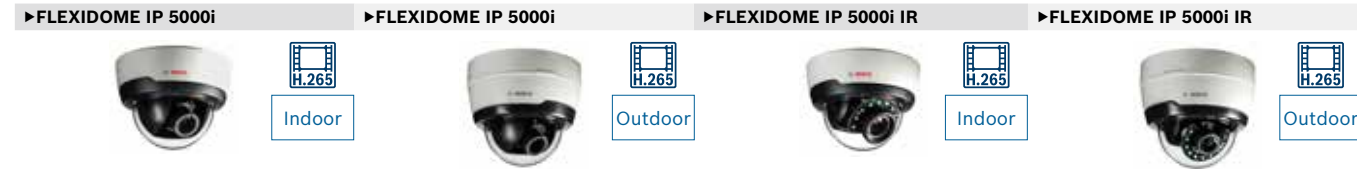
►FLEXIDOME IP 4000i ►FLEXIDOME IP 4000i ►FLEXIDOME IP 4000i IR ►FLEXIDOME IP 4000i IR



■ Available – Not available

Commercial Type Number	NDI-4502-A	NDE-4502-A	NDI-4502-AL	NDE-4502-AL
Video analytics at the edge	Essential Video Analytics	■	■	■
	Intelligent Video Analytics	-	-	-
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	■
	Intelligent streaming	■	■	■
Basic features	Compression (H.265 / H.264 & MJPEG) / multi-streaming	■/■/4 streams	■/■/4 streams	■/■/4 streams
	Maximum resolution	HD 1080p	HD 1080p	HD 1080p
	Image sensor type	1/2.9"	1/2.9"	1/2.9"
	Max. frames per second (fps)	30 fps@ 1080p	30 fps@ 1080p	30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/ - /-	■/■/-	■/ - /-
	Day / night	■	■	■
	Wide Dynamic Range (WDR)	88dB	88dB	88dB
	ONVIF conformant	■	■	■
	Built-in microphone	■	-	■
	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	-/■
Advanced features	Privacy masking	■	■	■
	Region Of Interest tracking	-	-	-
Alarm triggering	Upright video mode	■	■	■
	Tamper detection / Video motion detection	■	■	■
Sensitivity	Built-in video analytics	■	■	■
	Audio detection	■	■	■
	Minimum illumination day mode (color)	0.1 lux	0.1 lux	0.1 lux
	Minimum illumination night mode (black / white)	0.02 lux	0.02 lux	0 lux (IR on)
Lens	Night vision	-	-	■ (infrared)
	Max. range at night	-	-	30 m (98 ft)
	Automatic Back Focus (ABF)	-	-	-
	Automatic varifocal	■	■	■
DORI distances	Focal length	3 - 10 mm	3 - 10 mm	3 - 10 mm
	Horizontal Angle of View (HAoV)	34° - 101°	34° - 101°	34° - 101°
Storage	Detect / Observe / Recognize / Identify (Distances in according to EN-IEC 62676-4 standard)	32-126/13-50/6-25/3-13	32-126/13-50/6-25/3-13	32-126/13-50/6-25/3-13
	Memory card slot	■ up to 2 TB	■ up to 2 TB	■ up to 2 TB
Connections	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
	Alarm input / output	1/1	1/1	1/1
Housing	Audio in / out	■/■	■/■	■/■
	Hybrid / public view monitor	■/■	■/■	■/■
	Weather rating	-	IP66	-
Power input voltage	Vandal resistant	IK04	IK10	IK10
	Operating temperature	-20° to 50° C (-4° to 122° F)	-40° to 50° C (-22° to 122° F)	-20° to 50° C (-4° to 122° F)

IP Video
Dome Cameras



■ Available – Not available

Commercial Type Number		NDI-5503-A	NDE-5503-A	NDI-5503-AL	NDE-5503-AL
Video analytics at the edge	Essential Video Analytics	■	■	■	■
	Intelligent Video Analytics	-	-	-	-
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent streaming	■	■	■	■
Basic features	Compression (H.265 / H.264 & MJPEG) / multi-streaming	■/■/4 streams	■/■/4 streams	■/■/4 streams	■/■/4 streams
	Maximum resolution	5MP	5MP	5MP	5MP
	Image sensor type	1/2.9"	1/2.9"	1/2.9"	1/2.9"
	Max. frames per second (fps)	30 fps@ 5MP	30 fps@ 5MP	30 fps@ 5MP	30 fps@ 5MP
	Indoor / outdoor / in-vehicle	■/-/-	■/■/-	■/-/-	■/■/-
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	■	-	■	-
	Advanced features	Intelligent Auto Exposure / Intelligent Defog	■/■	■/■	■/■
Privacy masking		■	■	■	■
Region Of Interest tracking		-	-	-	-
Tamper detection / Video motion detection		■	■	■	■
Alarm triggering	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)	0.03 lux	0.03 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 - 10 mm	3 - 10 mm	3 - 10 mm	3 - 10 mm
	Horizontal Angle of View (HAoV)	26° - 77°	26° - 77°	26° - 77°	26° - 77°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	59-266/24-106/12-53/6-27	59-266/24-106/12-53/6-27	59-266/24-106/12-53/6-27	59-266/24-106/12-53/6-27
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	IK04	IK10	IK04	IK10
	Operating temperature	-20° to 50° C (-4° to 122° F)	-40° to 50° C (-22° to 122° F)	-20° to 50° C (-4° to 122° F)	-40° to 50° C (-22° to 122° F)
Power input voltage	Power over Ethernet/12V/24V	■/■/■	■/■/■	■/■/■	■/■/■

IP Video
Dome Cameras



■ Available – Not available

Commercial Type Number		NIN-63013-Axxx	NIN-73013-Axxx	NIN-63023-Axxx	NIN-73023-Axxx
Video analytics at the edge	Essential Video Analytics	■	-	■	-
	Intelligent Video Analytics	-	■	-	■
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent streaming	■	■	■	■
Basic features	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams	-/■/4 streams	-/■/4 streams
	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	60 fps@ 720p	60 fps@ 1.3MP / 1080p	60 fps@ 1.3MP / 1080p
	Indoor / outdoor / in-vehicle	■/■/-	■/■/-	■/■/-	■/■/-
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	-	-	-	-
	Advanced features	Intelligent Auto Exposure / Intelligent Defog	■/■	■/■	■/■
Privacy masking		■	■	■	■
Region Of Interest tracking		■	■	■	■
Upright video mode		■	■	■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	■	■	■	■
Sensitivity	Audio detection	■	■	■	■
	Minimum illumination day mode (color)	0.0075 lux	0.0075 lux	0.0075 lux	0.0075 lux
Lens	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	-	-	-	-
	Automatic Back Focus (ABF)	■	■	■	■
Automatic varifocal	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)	59° - 117° (A3xx)	59° - 117° (A3xx) 14.4° - 32° (A10xx)	59° - 117° (A3xx)	59° - 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)
Power input voltage	Power over Ethernet/12V/24V	■/■/-	■/■/-	■/■/-	■/■/-

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	
Video analytics at the edge	Essential Video Analytics	-	-	-	
	Intelligent Video Analytics	■ (depends on model)	■ (depends on model)	■	
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	■	
	Intelligent streaming	■	■	■	
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams	-/■/4 streams	
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 (model with IAE + 16dB)	76dB (model with IAE + 16dB)	90dB (with IAE + 16dB)	
	ONVIF conformant	■	■	■	
	Built-in microphone	-	-	-	
	Advanced features	Intelligent Auto Exposure / Intelligent Defog	■ (depends on model)/■	■ (depends on model)/■	■/■
		Privacy masking	■	■	■
Region Of Interest tracking		■	■	■	
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	
	Built-in video analytics	■ (depends on model)	■ (depends on model)	■	
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	
Lens	Night vision	■ (starlight)	-	-	
	Max. range at night	-	-	-	
	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 (Distances according to EN-IEC 62676-4 standard)	20-32/8-13/4-6/2-3 (V02-xx) 35-138/14-55/7-28/4-14 (V03-xx) 96-413/38-164/19-83/10-41 (V09-xx)	16-40/6-16/3-8/2-4 (V02-xx) 27-166/11-66/5-33/3-17 (V03-xx) 77-517/30-205/15-103/8-52 (V09-xx)	22-55/9-22/4-11/2-5 (V02-xx) 42-229/17-91/8-46/4-23 (V03-xx) 111-709/44-281/22-142/11-71 (V09-xx)	
	Storage	Memory card slot Cloud application storage	■ (up to 2 TB) Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting	■ (up to 2 TB) 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	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)	
Power input voltage	Power over Ethernet/12V/24V	■/■/■	■/■/■	■/■/■	

IP Video Dome Cameras

►FLEXIDOME IP panoramic 5000 MP ►FLEXIDOME IP panoramic 5000 MP ►FLEXIDOME IP panoramic 7000 MP ►FLEXIDOME IP panoramic 7000 IC



■ Available – Not available

Commercial Type Number		NUC-52051-F0	NUC-52051-F0E	NIN-70122-Fx(A)	NFN-70122-Fx(A)	
Video analytics at the edge	Essential Video Analytics	-	-	■ (depending on model)	■ 6000 model	
	Intelligent Video Analytics	-	-	■ (depending on model)	■ 7000 model	
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	■	■	
	Intelligent streaming	■	■	■	■	
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams	-/■/4 streams	-/■/4 streams	
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 (with IAE + 16dB)	92dB (with IAE + 16dB)	
	ONVIF conformant	■	■	■	■	
	Built-in microphone	■	-	■	-	
	Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	■ (customized region)/■	■ (customized region)/■
		Edge dewarping	-	-	■	■
Privacy masking		■	■	■	■	
Alarm triggering	Region Of Interest tracking	-	-	■	■	
	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■	
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)	
Lens	Night vision	-	-	-	-	
	Max. range at night	-	-	-	-	
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)	
Power input voltage	Power over Ethernet/12V/24V	■/■/-	■/■/-	■/-/-	■/-/-	

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)
Video analytics at the edge	Essential Video Analytics Intelligent Video Analytics	- -	- -
Bitrate management	Intelligent Dynamic Noise Reduction Intelligent streaming	■ ■	■ ■
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams
Basic features	Maximum resolution	HD 720p	HD 720p
	Image sensor type	1/4"	1/4"
	Max. frames per second (fps)	30 fps@ 720p	30 fps@ 720p
	Indoor / outdoor / in-vehicle	■/-/-	■/-/-
	Day / night	■ (electronic)	■ (electronic)
	Wide Dynamic Range (WDR)	76dB	76dB
	ONVIF conformant	■	■
	Built-in microphone	■	■
Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/-	-/-
	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
	Minimum illumination night mode (black/white)	-	0 lux (with wLED)
	Night vision	-	■ (wLED)
	Max. range at night	-	4 m (13 ft)
Lens	Automatic Back Focus (ABF)	-	-
	Automatic varifocal	-	-
	Focal length	2.5 mm	2.5 mm
	Horizontal Angle of View (HAoV)	89°	89°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	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
Connections	Alarm input / output	-/-	■/■
	Audio in / out	-/- (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)
Power input voltage	Power over Ethernet/12V/24V	■/-/-	■/-/-

End of life: 31-03-2018
Last buy date: 30-12-2017

IP Video Fixed Cameras

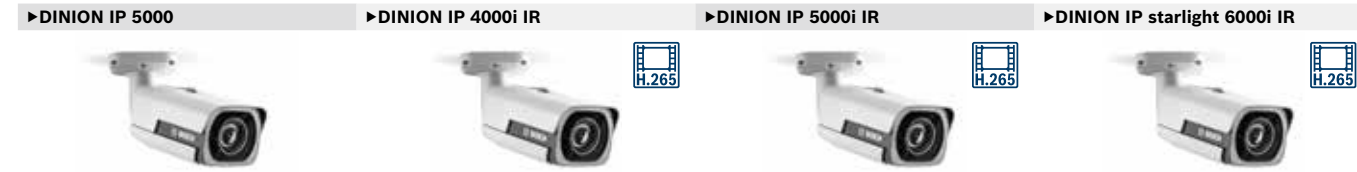
►DINION IP 5000 HD ►DINION IP 5000 MP



■ Available – Not available

Commercial Type Number	NBN-50022-xxx	NBN-50051-xxx
Video analytics at the edge	Essential Video Analytics Intelligent Video Analytics	- -
Bitrate management	Intelligent Dynamic Noise Reduction Intelligent streaming	■ ■
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams
Basic features	Maximum resolution	HD 1080p
	Image sensor type	1/2.7"
	Max. frames per second (fps)	30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/■ (with housing)/-
	Day / night	■
	Wide Dynamic Range (WDR)	76dB
	ONVIF conformant	■
	Built-in microphone	■
Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/■
	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
	Minimum illumination night mode (black/white)	0.05 lux
	Night vision	-
	Max. range at night	-
Lens	Automatic Back Focus (ABF)	-
	Automatic varifocal	-
	Focal length	3.3 - 12 mm (V3)/CS mount
	Horizontal Angle of View (HAoV)	34° - 110° (V3)
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	27-125/11-50/5-25/3-13 (V3)
Storage	Memory card slot	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	1/1
	Audio in / out	■/■
	Hybrid / public view monitor	■/■
Housing	Weather rating	-
	Vandal resistant	-
	Operating temperature	-30° to 50° C (-22° to 122° F)
Power input voltage	Power over Ethernet/12V/24V	■/■/-

IP Video
Fixed Cameras



■ Available – Not available

Commercial Type Number		NTI-50022-A3S	NBE-4502-AL	NBE-5503-AL	NBE-6502-AL
Video analytics at the edge	Essential Video Analytics	-	■	■	■
	Intelligent Video Analytics	-	-	-	-
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent streaming	■	■	■	■
Basic features	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	■/■/4 streams	■/■/4 streams	■/■/4 streams
	Maximum resolution	HD 1080p	HD 1080p	5MP	HD 1080p
	Image sensor type	1/2.9"	1/2.8"	1/2.8"	1/2.8"
	Max. frames per second (fps)	30 fps@ 1080p	30 fps@ 1080p	30 fps@ 5MP	60 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/■/-	■/■/-	■/■/-	■/■/-
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	76dB	85dB	120dB	134dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	-	-	-	-
	Power over Ethernet (PoE)	■	■	■	■
Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	■/■	■/■
	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)	0.07 lux	0.052 lux	0.369 lux	0.0225 lux
	Minimum illumination night mode (black/white)	0 lux (IR on)	0lux (IR on)	0lux (IR on)	0lux (IR on)
	Night vision	■ (infrared)	■ (Infrared)	■ (Infrared)	■ (Infrared)
	Max. range at night	30 m (98 ft)	60 m (196 ft)	50 m (164 ft)	60 m (196 ft)
Lens	Automatic Back Focus (ABF)	-	-	-	-
	Automatic varifocal	■	■	■	■
	Focal length	2.7 - 12 mm	2.8 - 12 mm	2.7 - 12 mm	2.8 - 12 mm
DORI distances	Horizontal Angle of View (HAoV)	32° - 100°	33° - 100°	28° - 95°	33° - 100°
	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	32-133/12-53/6-26/3-13	33-130/13-51/6-26/3-13	56-246/22-98/11-49/6-25	33-130/13-51/6-26/3-13
Storage	Memory card slot	■ (up to 2 TB)	■ (up to 2TB)	■ (up to 2TB)	■ (up to 2TB)
	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	IP67	IP67	IP67
	Vandal resistant	IK08	IK10	IK10	IK10
	Operating temperature	-30° to 60° C (-22° 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)
Power input voltage	Power over Ethernet/12V/24V	■/■/■	■/■/■	■/■/■	■/■/■

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

** The NTI-50022-A3S model has a pre-mounted Surface Mount Box

IP Video
Fixed Cameras



■ Available – Not available

Commercial Type Number		NBN-63013-B **	NBN-73013-BA **	NBN-63023-B **	NBN-73023-BA **
Video analytics at the edge	Essential Video Analytics	■	-	■	-
	Intelligent Video Analytics	-	■	-	■
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	■	■
	Intelligent streaming	■	■	■	■
Basic features	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams	-/■/4 streams	-/■/4 streams
	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)	60 fps @ 720p	60 fps @ 720p	60 fps @ 1.3MP / 1080p	60 fps @ 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	Intelligent Auto Exposure / Intelligent Defog	■/■	■/■	■/■	■/■
	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
DORI distances	Horizontal Angle of View (HAoV)	depending on optional lens	depending on optional lens	depending on optional lens	depending on optional lens
	Detect / Observe / Recognize / Identify (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)
Power input voltage	Power over Ethernet/12V/24V	■/■/-	■/■/-	■/■/-	■/■/-

**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-CA	
Video analytics at the edge	Essential Video Analytics	-	-	
	Intelligent Video Analytics	■	■	
Bitrate management	Intelligent Dynamic Noise Reduction	■	■	
	Intelligent streaming	■	■	
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams	
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	Intelligent Auto Exposure / Intelligent Defog	■/-	■/-
		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)	0.11 lux (CA)	
	Minimum illumination night mode (black/white)	0.004 lux (5 MP) 0.0028 lux (1080p)	0.037 lux (CA)	
	Night vision	■ (starlight)	-	
	Max. range at night	-	-	
Lens	Automatic Back Focus (ABF)	■	-/■(CA)	
	Automatic varifocal	-	-	
	Focal length	C/CS mount	C/CS mount (CA) - 35/50/75 P-iris lens 4-13 mm	
DORI distances	Horizontal Angle of View (HAoV)	Depending on optional lens	C/CS mount (CA) - 35/50/75 P-iris len: Wide: 86x48°; Tele: 27x15°	
	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	Depending on optional lens	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	-	-	
	Vandal resistant	-	-	
	Operating temperature	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)	
Power input voltage	Power over Ethernet/12V/24V	■/■/-	■/■/-	

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	
Video analytics at the edge	Essential Video Analytics	-	-	-	
	Intelligent Video Analytics	-	■	-	
Bitrate management	Intelligent Dynamic Noise Reduction	-	■	■	
	Intelligent streaming	■	■	■	
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams	-/■/4 streams	
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	-	-	-	
	Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/-	■/-	-/-
		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	
DORI distances	Horizontal Angle of View (HAoV)	5.3° - 31.9°	14.8° - 34°	121°	
	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)	
Power input voltage	Power over Ethernet/12V/24V	■/■/■	■ (HiPoE)/■/■	■/■/■	

IP Video
Specialty Cameras

►DINION IP thermal 8000 ►DINION IP thermal 8000i



QVGA



VGA

■ Available – Not available

Commercial Type Number	NHT-8000-F	NHT-8001-F
Video analytics at the edge	Essential Video Analytics Intelligent Video Analytics	– ■
Bitrate management	Intelligent Dynamic Noise Reduction Intelligent streaming	– ■
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	–/■/4 streams
Basic features	Maximum resolution Image sensor type	VGA Un-cooled vanadium oxide microbolometer
	Max. frames per second (fps)	9 fps (-FxxQS) or 60 fps (-FxxQF)
	Indoor / outdoor / in-vehicle	■/■/–
	Day / night	–
	Wide Dynamic Range (WDR)	–
	ONVIF conformant	■
	Built-in microphone	–
Advanced features	Intelligent Auto Exposure / Intelligent Defog	–/–
	Privacy masking	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
	Night vision	■ (thermal)
	Max. range at night	–
Lens	Automatic Back Focus (ABF)	–
	Automatic varifocal	–
	Focal length	7.5 mm (-F07Qx), 19 mm (-F19Qx)
	Horizontal Angle of View (HAoV)	7.5 mm: 41.8°, 19 mm: 16°
DRI distances	Detection / Recognition / Identification	7.5 mm: 140 m (459 ft) / 35 m (115 ft) / 18 m (59 ft) 19 mm: 380 m (1247 ft) / 95 m (312 ft) / 48 m (157 ft)
		9 mm: 155 m (509ft) / 40 m (131 ft) / 20 m (66 ft) 16.7 mm: 315 m (1033 ft) / 80 m (262 ft) / 40 m (131 ft) 35 mm: 690 m (2264 ft) / 170 m (558 ft) / 85 m (279 ft) 65 mm: 1270 m (4167 ft) / 320 m (1050 ft) / 160 m (525 ft)
Storage	Memory card slot	■ (up to 2TB)
	Cloud application storage	Auto or Alarm JPEG Posting (FTP only)
Connections	Alarm input / output	2/1
	Audio in / out	■/■
	Hybrid / public view monitor	■
Housing	Weather rating	IP66
	Vandal resistant	–
	Operating temperature	-50° to 55° C (-58° to 131° F)
Power input voltage	Power over Ethernet/12V/24V	–/–/■

IP Video
Moving Cameras

►AUTODOME IP 4000i ►AUTODOME IP 5000i ►AUTODOME IP 5000i IR



H.265



H.265

In-ceiling



H.265



H.265

In-ceiling



H.265

■ Available – Not available

Commercial Type Number	NDP-4502-Z12	NDP-4502-Z12C	NDP-5502-Z30	NDP-5502-Z30C	NDP-5502-Z30L
Video analytics at the edge	Essential Video Analytics Intelligent Video Analytics	■ –	■ –	■ –	■ –
Bitrate management	Intelligent Dynamic Noise Reduction Intelligent streaming	■ ■	■ ■	■ ■	■ ■
	Compression (H.265 / H.264 & MJPEG) /multi-streaming	■/■/4 streams	■/■/4 streams	■/■/4 streams	■/■/4 streams
Basic features	Maximum resolution	HD 1080p	HD 1080p	HD 1080p	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)	60 fps@ 1080p	60 fps@ 1080p	60 fps@ 1080p	60 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/–/–	■/–/–	■/■/–	■/■/–
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	94dB	94dB	94dB	94dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	–	–	–	–
Advanced features	Intelligent Auto Exposure / Intelligent Defog	–/■	–/■	–/■	–/■
	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)	0.05 lux	0.05 lux	0.05 lux	0.05 lux
	Minimum illumination night mode (black/white)	0.01 lux	0.01 lux	0.01 lux	0 lux (IR on)
	Night vision	–	–	–	■ (infrared)
	Max. range at night	–	–	–	180m (590 ft)
Lens	Focal length	5.3 - 64 mm	5.3 - 64 mm	4.5 - 135 mm	4.5 - 135 mm
	Horizontal Angle of View (HAoV)	4.9° to 58.5°	4.9° to 58.5°	2.4° to 60.9°	2.4° to 60.9°
	PTZ Zoom optical/digital	12x/16x	12x/16x	30x/16x	30x/16x
	Tilt angle	-90° to 0°	-90° to 0°	-90° to 0°	-90° to 3°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	69-897/27-356/14-179/7-90	69-897/27-356/14-179/7-90	65-1833/26-727/13-367/7-183	65-1833/26-727/13-367/7-183
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	IP65	IP51	IP66	IP66
	Vandal resistant	IK10	IK6	IK10	–
	Operating temperature	-10° to 55° C (14° to 131° F)	-10° to 55° C (14° to 131° F)	-40° to 60° C (-40° to 140° F)	-10° to 60° C (14° to 140° F)
Power input voltage	Power over Ethernet/12V/24V	■ (PoE+)/–/■	■ (PoE+)/–/■	■ (PoE+)/–/■	■ (PoE+)/–/■

IP Video

Moving Cameras

►AUTODOME IP 7000



■ Available – Not available

Commercial Type Number		VG5-7028/7036	
Video analytics at the edge	Essential Video Analytics	-	
	Intelligent Video Analytics	■	
Bitrate management	Intelligent Dynamic Noise Reduction	-	
	Intelligent streaming	■	
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	
Basic features	Maximum resolution	4CIF	
	Image sensor type	1/4" CCD	
	Max. frames per second (fps)	30 fps@ 576p	
	Indoor / outdoor / in-vehicle	■/■/-	
	Day / night	■	
	Wide Dynamic Range (WDR)	92dB	
	ONVIF conformant	■	
	Built-in microphone	-	
	Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/-
		Privacy masking	■
		Nbr of presets/guard tours	256/2
		Wiper	-
		Intelligent Tracking	■
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)	
	Minimum illumination night mode (black/white)	0.104 lux (36x) 0.066 lux (28x)	
	Night vision	-	
	Max. range at night	-	
Lens	Focal length	3.4 - 122.4 mm (x36) 3.5 - 98 mm (x28)	
	Horizontal Angle of View (HAoV)	28x : 2.13 to 54.98 36x : 1.7 to 56.35	
	PTZ Zoom optical/digital	36x or 28x/12x	
	Tilt angle	-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)
Storage	Memory card slot	■ (up to 2 TB)	
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	
Connections	Alarm input / output	7/4	
	Audio in / out	■/■	
	Hybrid / public view monitor	-/-	
Housing	Weather rating	IP66 (pendant)/IP54 (in-ceiling)	
	Vandal resistant	IK08 (with rugged bubble)	
	Operating temperature	-40° to 55° C (-40° F to 131° F)	
Power input voltage	Power over Ethernet/12V/24V	■ (HiPoE)/-/■	

IP Video

Moving Cameras

►AUTODOME IP starlight 7000 HD



■ Available – Not available

Commercial Type Number		VG5-7230
Video analytics at the edge	Essential Video Analytics	-
	Intelligent Video Analytics	■
Bitrate management	Intelligent Dynamic Noise Reduction	■
	Intelligent streaming	■
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams
Basic features	Maximum resolution	HD 1080p
	Image sensor type	1/2.8"
	Max. frames per second (fps)	60 fps@ 720p 30 fps@ 1080p
	Indoor / outdoor / in-vehicle	■/■/-
	Day / night	■
	Wide Dynamic Range (WDR)	120dB
Advanced features	ONVIF conformant	■
	Built-in microphone	-
	Intelligent Auto Exposure / Intelligent Defog	-/■
	Privacy masking	■
	Nbr of presets/guard tours	256/2
Alarm triggering	Wiper	-
	Intelligent Tracking	■
	Tamper detection / Video motion detection	■/■
	Built-in video analytics	■
Sensitivity	Audio detection	■
	PTZ Intelligent Tracking	■
	Minimum illumination day mode (color)	0.0077 lux
	Minimum illumination night mode (black/white)	0.0008 lux
Lens	Night vision	■ (starlight)
	Max. range at night	-
	Focal length	4.3 - 129 mm
	Horizontal Angle of View (HAoV)	2.3° to 63.7°
	PTZ Zoom optical/digital	30x/12x
DORI distances	Tilt angle	-90° to 14° (pendant)
	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	62-1913/25-759/12-383/6-191
Storage	Memory card slot	■ (up to 2 TB)
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
Connections	Alarm input / output	7/4
	Audio in / out	■/■
	Hybrid / public view monitor	-/-
Housing	Weather rating	IP66 (pendant)/IP54 (in-ceiling)
	Vandal resistant	IK10 (with rugged bubble)
	Operating temperature	-40° to 55° C (-40° F to 131° F)
Power input voltage	Power over Ethernet/12V/24V	■ (HiPoE)/-/■

IP Video

Moving Cameras

► MIC IP starlight 7000i



■ Available – Not available

Commercial Type Number	MIC7502-Z30x		
Video analytics at the edge	Essential Video Analytics	-	
	Intelligent Video Analytics	■	
Bitrate management	Intelligent Dynamic Noise Reduction	■	
	Intelligent streaming	■	
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	■/■/4 streams	
Basic features	Maximum resolution	HD 1080p	
	Image sensor type	1/2.8"	
	Max. frames per second (fps)	60 fps@ 1080p	
	Indoor / outdoor / in-vehicle	-/■/-	
	Day / night	■	
	Wide Dynamic Range (WDR)	120dB	
	ONVIF conformant	■	
	Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/■
		Privacy masking	■
Nbr of presets/guard tours		256/2	
Wiper		■	
Alarm triggering	Intelligent Tracking	■	
	Tamper detection / Video motion detection	■/■	
	Built-in video analytics	■	
	Audio detection	■ (with VJC-7000-90)	
Sensitivity	PTZ Intelligent Tracking	■	
	Minimum illumination day mode (color)	0.0077 lux	
	Minimum illumination night mode (black/white)	0.0008 lux	
	Night vision	■ (optional illuminator)	
	Max. range at night	450 m (1476 ft)	
Lens	Focal length	4.3 - 129 mm	
	Horizontal Angle of View (HAoV)	2.3° to 63.7°	
	PTZ Zoom optical/digital	30x/12x	
	Tilt angle	-58° to 90° (upright), -90° to 90° (canted)	
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	62-1913/25-759/12-383/6-191	
Storage	Memory card slot	■ (up to 32 GB) (with VJC-7000-90)	
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	
Connections	Alarm input / output	5/3 (with MIC-ALM-WAS-24)	
	Audio in / out	■/- (with VJC-7000-90)	
	Hybrid / public view monitor	■ (with external decoder)/-	
Housing	Weather rating	IP68	
	Vandal resistant	IK10	
	Operating temperature	-40° to 65° C (-40° F to 149° F)	
Power input voltage	Power over Ethernet/12V/24V	■ (PoE+/-)/■	

IP Video

Moving Cameras

► MIC IP fusion 9000i



■ Available – Not available

Commercial Type Number	MIC-9502-Z30xxx		
Video analytics at the edge	Essential Video Analytics	-	
	Intelligent Video Analytics	■ (Thermal and Optical)	
Bitrate management	Intelligent Dynamic Noise Reduction	■	
	Intelligent streaming	■	
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	■/4 streams (optical + thermal)	
Basic features	Maximum resolution	HD 1080p (optical) / 320/640 pixel (thermal)	
	Image sensor type	1/2.8" CMPS (optical) / Un-cooled microbolometer (thermal)	
	Max. frames per second (fps)	60 fps@ 1080p (optical) <9/30 fps w/640 pixel (thermal) <9/60 fps w/320 pixel (thermal)	
	Indoor / outdoor / in-vehicle	-/■/-	
	Day / night	■ (optical)	
	Wide Dynamic Range (WDR)	120dB	
	ONVIF conformant	■	
	Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/■
		Privacy masking	■
Nbr of presets/guard tours		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)	0.0077 lux (optical) N.A. (thermal)	
	Minimum illumination night mode (black/white)	0.0008 lux (optical) 0 lux (thermal)	
	Night vision	■ (thermal)	
	Max. range at night	300 m (971 ft) (optical)	
		1540m (5050 ft) w/320 pixel (thermal) 3550m (11,600 ft) w/640 pixel (thermal)	
Lens	Focal length	4.3 - 129 mm (optical), 19 mm w/320 pixel (thermal) 50 mm w/640 pixel (thermal)	
	Horizontal Angle of View (HAoV)	2.3° to 63.7° (optical) 16° w/320 pixel, 12.4° w/640 pixel (thermal)	
	PTZ Zoom optical/digital	30x/12x	
	Tilt angle	-56° to +90° (upright), -90° to +56° (inverted)	
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	62-1913/25-765/12-383/6-191	
Storage	Memory card slot	■ (embedded)	
	Cloud application storage	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting	
Connections	Alarm input / output	5/3 (with MIC-ALM-WAS-24)	
	Audio in / out	■/■	
	Hybrid / public view monitor	-	
Housing	Weather rating	IP68	
	Vandal resistant	IK10	
	Operating temperature	-40° to 65° C (-40° F to 149° F)	
Power input voltage	Power over Ethernet/12V/24V	■ (HiPoE)/-/■	

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

IP Video Digital Storage



■ Available – Not available

Commercial Type Number		DIP-504xxx-xxx	DIP-618x-xxx	DIP-61Fx-xxx	DSA-Nxxxxx-xxxx
Basic functions	Max. system size (channels)	32	128 (standard 64)	128 standard (64)	800 per base unit
	Integrated video management	–	–	–	–
	RAID Level	JBOD, RAID-1	RAID-5, RAID-6	RAID-5, RAID-6	RAID-5 / RAID-6 / DDP*
	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	2U: 19-inch Rack Mount 4U: 19-inch Rack Mount
	Network connections (LAN)	2x Gigabit Ethernet	2x Gigabit Ethernet, 1x 100Mbit (Mgmt)	2x Gigabit Ethernet, 1x 100Mbit (Mgmt)	Per controller : 2x 10 Gigabit Ethernet + 2x 10 Gigabit Ethernet Optical
	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	–
	Monitor output	–	1 (service only)	1 (service only)	–
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)	–
	Compression type	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	2U:12 4U:60
	Available capacities per drive	2, 4 or 6 TB	3, 4, 6 or 8 TB	3, 4, 6 or 8 TB	4, 8 or 10 TB
	Base system capacity TB	0, 4, 8, 16 or 24 TB	0, 12, 16, 24, 32, 48 or 64 TB	0, 48, 64, 96 or 128 TB	2U: 48 / 96 / 120 4U: 240 / 480 / 600
	Full system capacity TB	24 TB	576 TB	640 TB	2U: 2U Base + 7x 2U Extensions 4U: 4U Base + 2x 4U Extensions
	Extenable/external support	iSCSI	iSCSI	iSCSI	12Gb/s SAS (Copper)
	Max. number of units	–	4x DIVAR IP 6000	4x DIVAR IP 6000	2U:7 4U:2
Storage extentions	Maximum drives supported	–	4, 6 or 8	16	2U:12 4U:60
	Available capacities per drive	–	3, 4, 6 or 8 TB	3, 4, 6 or 8 TB	4, 8 or 10 TB
	Hot swappable	–	■	■	■
Export/back-up of data	Data format	MP4	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	–
	Back-up mode	manual	manual	manual	–

Table continued on the next page

IP Video Digital Storage



■ Available – Not available

Commercial Type Number		DIP-504x-xxx	DIP-618x-xxx	DIP-61Fx-xxx	DSA-Nxxxxx-xxxx
Redundancy	Power supply redundancy	–	■	■	■
	Hot swappable HDD	–	■	■	■
Software options	PTZ control	o *	o *	o *	–
	CCTV keyboard support	o *	o *	o *	–
	Admin control	o *	o *	o *	–
	Export options	o *	o *	o *	–
	Mobile device (smart phone/tablet)	■ Video security app	■ Video security app	■ Video security app	–
Remote access	Network	10/100/1000 Ethernet	10/100/1000 Ethernet	10/100/1000 Ethernet	–
	Web browser access	■	■	■	–
	Simultaneous accessible users	5	5	5	–
	Forensic search support (metadata)	■	■	■	–
Advanced features support	Webclient	■	–	–	■
	Bosch Video Client	■	■	■	–
Supported software	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**)	■	–	–	–

o * Via Bosch video software

* DDP - Dynamic Disk Pools - supported Q1 2018

** Integration Partner Program (IPP) for more information visit <http://ipp.boschsecurity.com>

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
	Alarm Inputs/Outputs	4 / 2	4 / 2
	RAID Level	–	–
	Supported resolutions	up to 8MP	up to 12MP
	Video compression	H.264, H.265, MPEG-4	H.264, H.265, MPEG-4
	Transcoding	–	–
	ONVIF	■	■
Mechanical	Form factor	1U high Desktop	1.5U high Rack Mount
	Network connections (LAN)	2x Gigabit Ethernet	2x Gigabit Ethernet
	Build-in PoE+	0, 8 or 16 PoE+	0 or 16 PoE+
	USB ports	1x USB 2.0, 1xUSB 3.0	1x USB 2.0, 1xUSB 3.0
Video output	Connector type	VGA, HDMI	VGA, HDMI
	Spotmonitor	–	–
		–	■ (HDMI)
Audio	In/out channels	16 in / 1 out	32 in / 1 out
	Compression type	G.726	G.726
	Synchronous audio	■	■
	Associate multiple cameras to 1 Audio	–	–
Storage options	Max. drives supported	2	2
	Available capacities per drive	1, 2, 3, 4 or 6TB	1, 2, 3, 4 or 6TB
	Base system capacity TB	0, 2 TB	0, 2 TB
	Max. Base system capacity TB	12 TB	12 TB
	Full system capacity TB	12 TB	12 TB
	Extensible/external support	–	–
Storage extentions	Max. number of units	–	–
	Maximum drives supported	–	–
	Available capacities per drive	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
	Built-in DVD writer	■ (optional)	■ (optional)
	Supported devices	USB 2.0, USB 3.0, internal DVD Writer	USB 2.0, USB 3.0, internal DVD Writer
	Back-up mode	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
	Network	10/100/1000 Ethernet	10/100/1000 Ethernet
	Web browser access	■	■
	Simultaneous accessible users	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	–	–

* Integration Partner Program (IPP) for more information visit <http://ipp.boschsecurity.com>

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
Basic functions	Max. system size	16 analog + 16IP or 32IP
	Looping AN Video	–
	Alarm Inputs/Outputs	16 / 3
	RAID Level	–
	Supported resolutions IP cameras	up to 12MP
	Supported resolutions AN cameras	up to 960H
	Video compression	H.264, H.265, MPEG-4
	Transcoding	–
	ONVIF	■
	Mechanical	Form factor
Network connections (LAN)		2x Gigabit Ethernet
Build-in PoE+		–
USB ports		1x USB 2.0, 2xUSB 3.0
Video output	Connector type	VGA, HDMI
	Spotmonitor	■ (HDMI)
		■ (HDMI)

Table continued on the next page

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	
Audio	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	■	■
	Associate multiple cameras to 1 Audio	-	-
Storage options	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
	Extendable/external support	-	eSATA
Storage extensions	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
	Hot swappable	-	-
Export/back-up of data	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
Redundancy	Power supply redundancy	-	-
	Hot swappable HDD	-	-
Software options	PTZ control	■	■
	CCTV keyboard support	-	-
	Admin control	■	■
	Export options	■	■
Remote access	Mobile device (smart phone)	■ Mobile Viewer app	■ Mobile Viewer app
	Network	10/100/1000 Ethernet	10/100/1000 Ethernet
	Web browser access	■	■
	Simultaneous accessible users	128 (4 advised)	128 (4 advised)
Advanced features support	Forensic search support (metadata)	-	-
	Webclient	■	■
Supported software	Bosch Video Client	■	■
	Bosch Video Management Systems	■	■
	3rd Party software	-	-
3rd party integration tools	SDK (IPP*)	-	-

* Integration Partner Program (IPP) for more information visit <http://ipp.boschsecurity.com>

IP Video

Video Software

►Video Management System



■ Available – Not available

Name	BVMS Viewer	BVMS Professional	BVMS Enterprise	
System features	Included cameras (max cameras)	16 (500)	8 (2000)	200.000
	Maximum number of clients	1	100	100
	Maximum number of Bosch Video Management System (VMS) servers	1	1	10/30
	Maximum number of Bosch Video Recording Manager (VRM) servers	32**	125	1.250
	Maximum storage capacity	n.a.	125 x 2PB	1.250 x 2PB
	Forensic search	■	■	■
	DVR support	■	■	■
	Events and alarms	-	■	■
	Streamlining	-	■	■
	Remote access	-	■	■
	Dynamic transcoding	■	■*	■*
	Web client	-	■	n.a.
	Bosch Mobile Video Client App support	-	■	n.a.
	Keyboard support	-	■	■
	Maps	-	■	■
	Audio support	-	■	■
	Bosch VMS Config Wizard	-	■	n.a.
Live & Playback sites	■**	9.999	9.999	
Supported camera devices	Bosch panoramic cameras	■	■	■
	Bosch UHD cameras	■	■	■
	Bosch HD cameras	■	■	■
	Bosch SD / VGA cameras	■	■	■
	Third party ONVIF Profile S cameras	■	■	■
Redundancy	Automatic Network Replenishment (ANR)	-	■	■
	VMware® vSphere/ Microsoft Hyper-V Virtualization support	-	■	■
	VMware® vSphere High Availability support	-	■	■
	Microsoft Hyper-V Failover Cluster and Hyper-V Replica support	-	■	■
	Failover Video Recording Manager (VRM)	-	■	■
	Dual Recording	-	■	■
Alarm management	Logbook	-	■	■
	Events and alarms	-	■	■
	Email notification	-	■	■
	SMS notification	-	■	■
	Alarm-based recording	n.a.	■	■
	Motion recording	n.a.	■	■
	Video Analytics events	-	■	■
	SNMP support	-	■	■
	Workflow with instructions on alarm	-	■	■
	Maximum number of Bosch B/G Series intrusion panels	-	20	200
Integration	I/O module support	-	■	■
	Active directory connectivity	■	■	■
	ATM-POS support	-	■	■
	Additional data	-	■	■
	Software Development Kit (SDK)	-	■	■

* additional hardware required

** limited

IP Video Viewing Software



■ 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	■	■	■
Video analytics	■	■	■
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)
16:9 monitor support	n/a	■	■
Viewing frequency	-	-	-
Dynamic cameo scaling	■	■	■
Alarm Management			
User management	-	-	-
Digital I/O alarms	-	-	■
System event alarms	-	-	■
Motion alarms	-	-	■
Event response and command scripts	-	-	-
Video analytics alarms	-	-	■
Video analytics forensic search	■ (Simple search)	■ (Simple search)	■
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)
Video analytics metadata	■	■	■
Support redundant storage	-	-	-
DLA Support (VRM Mode)	■	■	■ (1)
Integration			
BRS	-	-	-
DxR 400/600/700	-	-	■
Virtual inputs	-	-	■

IP Video Encoders and Decoders



■ Available – Not available

Commercial Type Number	VIP-X1XF-E	VIP-X1XF	VJM-4016	VJD-3000	VJD-8000
Description	Single Channel Video Encoder	Single Channel Premium Encoder	16 Channel H.264 Video Encoder	Single/Quad-stream Decoder	4K UHD and MP Video Decoder
Video/Audio					
Camera Inputs	1	1	16	-	-
Monitor Outputs	-	-	-	1 of 2 (HDMI, CVBS)	2 (mini DP)
Video Codec	H.264	H.264	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@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	1/1	0/1 (via DP)
Transcoding at the edge	-	-	-	-	-
Storage					
Type	SD Card	SD Card	-	-	-
Capacity	2 TB	2 TB	-	-	-
Intelligence					
Direct-to-iSCSI	■	■	■	-	-
Video Analytics	Motion+	IVA	Motion+	-	-
Interfaces					
Alarm In	1	2	4	4	-
Relay Out	1	2	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	-	■

Modular Systems



■ 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

Transcoder/network & alarm interface device
►VIDEOJET connect 7000



■ Available – Not available

Commercial Type Number	VJC-7000-90
Description	5 Channel network switch/Single-stream Transcoder
Video/Audio	
Camera Inputs	4
Video Codec	H.264 High Profile
Max. frames per second (fps)	25/30@4CIF
Audio in / out	1/-
Transcoding at the edge	■
Storage	
Type	CF
Capacity	2 TB
Intelligence	
Direct-to-iSCSI	-
Video Analytics	-
Interfaces	
Alarm In	4 dry contacts, 2 monitored tamper alarm (With MIC IP 7000)
Alarm Out	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)
Other	
Output power	95W HiPoe
Washer pump control	■ (relay)
Support for daisy-chaining of multiple cameras	■

IP Video Flat Panel Monitors

►High Definition



■ 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 ²)	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	-	-	-	-	-	-
Fixed desktop stand	-	-	included	UMM-LED32-SD	UMM-LED42-SD	UMM-LED42-SD
Adjustable desktop stand	■	■	-	-	-	-
Fixed Wall Mount	-	-	-	-	ST650	ST650
Swivel/Tilt Wall Mount	-	-	UMM-WMT-32	UMM-WMT-32	-	-

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