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Invented for life

# IP Video product overview

October 2019





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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.

## Camera trainer

We've taken the next step in video security with cameras that incorporate built-in machine learning capabilities. Camera Trainer enables you to tailor built-in Video Analytics to detect the things that matter most to you. The camera retains information on new user-defined objects and situations, or any subsequent changes. It then refers to these new learnings when processing scenes and can be combined with pre-determined alarm rules and object filters for even more accuracy and flexibility.

## 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.





# Fixed cameras

## Indoor




































## Outdoor

### Essential Video Analytics

### Intelligent Video Analytics

### Essential Video Analytics

### Intelligent Video Analytics

<p><b>FLEXIDOME IP micro 3000i</b></p>  <p><b>NDV-350x-Fxx</b> Up to 5MP</p>	<p><b>FLEXIDOME IP turret 3000i IR</b></p>  <p><b>NTV-350x-FxxL</b> Up to 5MP</p>	<p><b>DINION IP starlight 7000 HD</b></p>  <p><b>NBN-73013-BA</b> 60 fps@720p, starlight</p>	<p><b>DINION IP starlight 7000 HD</b></p>  <p><b>NBN-73023-BA</b> 60 fps@1080p, starlight</p>	<p><b>FLEXIDOME IP 3000i IR</b></p>  <p><b>NDE-350x-AL</b> Up to 5MP</p>	<p><b>DINION IP 3000i IR</b></p>  <p><b>NBE-350x-AL</b> Up to 5MP</p>	<p><b>FLEXIDOME IP panoramic 6000 (outdoor)</b></p>  <p><b>NDS-6004-FxxxE</b> 30 fps@12MP</p>	<p><b>FLEXIDOME IP starlight 7000 VR</b></p>  <p><b>NIN-73013-Axxx</b> 60 fps@720p, starlight</p>	<p><b>FLEXIDOME IP starlight 7000 VR</b></p>  <p><b>NIN-73023-Axxx</b> 60 fps@1080p, starlight</p>	<p><b>DINION IP thermal 8000</b></p>  <p><b>NHT-8001-F</b> VGA</p>
<p><b>FLEXIDOME IP 4000i</b></p>  <p><b>NDI-4502-A</b> 30 fps@1080p</p>	<p><b>FLEXIDOME IP 4000i IR</b></p>  <p><b>NDI-4502-AL</b> 30 fps@1080p, IR</p>	<p><b>DINION IP starlight 8000 MP</b></p>  <p><b>NBN-80052-BA</b> 30 fps@5MP, starlight</p>	<p><b>DINION IP ultra 8000 MP</b></p>  <p><b>NBN-80122-CA</b> 30 fps@UHD</p>	<p><b>FLEXIDOME IP 4000i</b></p>  <p><b>NDE-4502-A</b> 30 fps@1080p</p>	<p><b>FLEXIDOME IP 4000i IR</b></p>  <p><b>NDE-4502-AL</b> 30 fps@1080p, IR</p>	<p><b>FLEXIDOME IP 5000i</b></p>  <p><b>NDE-5503-A</b> 30 fps@5MP</p>	<p><b>DINION IP thermal 8000</b></p>  <p><b>NHT-8000-F</b> QVGA</p>	<p><b>FLEXIDOME IP starlight 8000i</b></p>  <p><b>NDE-8502-R(T)</b> 1080p, starlight, 134dB</p>	<p><b>FLEXIDOME IP starlight 8000i</b></p>  <p><b>NDE-8503-R(T)</b> 6 MP, starlight, 120dB</p>
<p><b>FLEXIDOME IP 5000i</b></p>  <p><b>NDI-5503-A</b> 30 fps@5MP</p>	<p><b>FLEXIDOME IP 5000i IR</b></p>  <p><b>NDI-5503-AL</b> 30 fps@5MP, IR</p>	<p><b>FLEXIDOME IP panoramic 7000 IC</b></p>  <p><b>NFN-70122-Fx(A)</b> 30 fps@12MP, in-ceiling</p>	<p><b>FLEXIDOME IP panoramic 7000 MP</b></p>  <p><b>NIN-70122-Fx(A)</b> 30 fps@12MP</p>	<p><b>FLEXIDOME IP 5000i IR</b></p>  <p><b>NDE-5503-AL</b> 30 fps@5MP, IR</p>	<p><b>DINION IP 4000i IR</b></p>  <p><b>NBE-4502-AL</b> 30 fps@1080p</p>	<p><b>DINION IP 5000i IR</b></p>  <p><b>NBE-5503-AL</b> 30 fps@5MP</p>	<p><b>FLEXIDOME IP starlight 8000i</b></p>  <p><b>NDE-8504-R</b> 4K ultra HD, starlight, 120dB</p>	<p><b>DINION IP imager 9000 HD</b></p>  <p><b>NAI-90022-AAA</b> 30 fps@1080p</p>	<p><b>FLEXIDOME IP panoramic 7000 (outdoor)</b></p>  <p><b>NDS-7004-FxxxE</b> 30 fps@12MP</p>
<p><b>DINION IP starlight 6000 HD</b></p>  <p><b>NBN-63013-B</b> 60 fps@720p, starlight</p>	<p><b>DINION IP starlight 6000 HD</b></p>  <p><b>NBN-63023-B</b> 60 fps@1080p, starlight</p>			<p><b>DINION IP starlight 6000i IR</b></p>  <p><b>NBE-6502-AL</b> 60 fps@1080p, starlight</p>	<p><b>FLEXIDOME IP starlight 6000 VR</b></p>  <p><b>NIN-63013-Axxx</b> 60 fps@720p</p>	<p><b>FLEXIDOME IP starlight 6000 VR</b></p>  <p><b>NIN-63023-Axxx</b> 60 fps@1080p, starlight</p>			




# Moving cameras

## Indoor

## Outdoor


## Extreme outdoor

**AUTODOME IP 4000i**



**NDP-4502-Z12**  
60 fps@1080p, Essential Video Analytics

**AUTODOME IP 4000i**



**NDP-4502-Z12C**  
in-ceiling, 60 fps@1080p, 12x zoom, Essential Video Analytics

**AUTODOME IP 5000i**



**NDP-5502-Z30**  
60 fps@1080p, Essential Video Analytics

**AUTODOME IP starlight 5000i**



**NDP-5512-Z30**  
60 fps@1080p, starlight, Essential Video Analytics

**MIC IP starlight 7100i**



**MIC-7522-Z32x**  
60 fps@1080p, starlight, 30x zoom, Intelligent Video Analytics

**MIC IP fusion 9000i**



**MIC-9502-Z30xxx**  
60 fps@1080p, fusion, Intelligent Video Analytics

**AUTODOME IP 5000i**



**NDP-5502-Z30C**  
in-ceiling, 60 fps@1080p, 30x zoom, Essential Video Analytics

**AUTODOME IP starlight 5000i**



**NDP-5512-Z30C**  
in-ceiling, 60 fps@1080p, 120dB, Essential Video Analytics

**AUTODOME IP 5000i IR**




**NDP-5502-Z30L**  
60 fps@1080p, IR, Essential Video Analytics

**AUTODOME IP starlight 5000i IR**



**NDP-5512-Z30L**  
60 fps@1080p, starlight, IR, Essential Video Analytics

**MIC IP ultra 7100i**



**MIC-7504-Z12B**  
4K ultra HD, 12x zoom, Intelligent Video Analytics, Image stabilization

**AUTODOME IP starlight 7000i**



**NDP-7512-Z30CT**  
in-ceiling, 60 fps@1080p, starlight, Intelligent Video Analytics

**AUTODOME IP starlight 7000i**



**NDP-7512-Z30**  
60 fps@1080p, starlight, Intelligent Video Analytics



# 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 turret 3000i IR

► FLEXIDOME IP micro 3000i

► FLEXIDOME IP micro 5000

■ Available – Not available

▶ = indication of main differentiator(s)

		 1080p	 5MP	 1080p	 5MP	 1080p	 5MP
Commercial Type Number		NTV-3502-FxxL	NTV-3503-FxxL	NDV-3502-Fxx	NDV-3503-Fxx	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	■/■/4 streams	■/■/4 streams	■/■/4 streams	-/■/4 streams	-/■/4 streams
Basic features	Maximum resolution ▶	HD 1080p	5MP	HD 1080p	5MP	HD 1080p	5MP
	Image sensor type ▶	1/2.8" CMOS	1/2.9" CMOS	1/2.8" CMOS	1/2.9" CMOS	1/2.7"	1/3"
	Max. frames per second (fps) ▶	30fps @ 1080p	20 fps @ 5.3MP 25 fps @ 4.1MP	30 fps@1080p	20 fps@5.3MP 25 fps@4.1MP	30 fps@1080p	12 fps@5MP
	Indoor / outdoor ▶	■/-	■/-	■/-	■/-	■/■	■/■
	Day / night	■	■	■ (electronic)	■ (electronic)	■ (electronic)	■ (electronic)
	Wide Dynamic Range (WDR) ▶	120dB	120dB	120dB	120dB	76dB	65dB
	ONVIF conformant	■	■	■	■	■	■
Advanced features	Built-in microphone ▶	■	■	■	■	-	-
	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) ▶	0.06 lux	0.5 lux	0.06 lux	0.5 lux	0.4 lux (F4) 1 lux (F2)	0.8 lux (F4) 2 lux (F2)
	Minimum illumination night mode (black/white) ▶	0.015 lux	0.2 lux	0.015 lux	0.2 lux	-	-
	Night vision ▶	■ (infrared)	■ (infrared)	-	-	-	-
	Max. range at night ▶	15 m	15 m	-	-	-	-
Lens	Automatic varifocal	-	-	-	-	-	-
	Focal length ▶	2.3 mm (F02) 2.8 mm (F03)	2.3 mm (F02) 2.8 mm (F03)	2.3mm (F02) 2.8mm (F03)	2.3mm (F02) 2.8mm (F03)	3.6 mm (F4) 2.5 mm (F2)	3.6 mm (F4) 2.5 mm (F2)
	Horizontal Angle of View (HAoV) ▶	132° (F02) 118° (F03)	118° (F02) 94° (F03)	132° (F02) 118° (F03)	118° (F02) 94° (F03)	97° (F4) 135° (F2)	69° (F4) 105° (F2)
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard) ▶	17/7/3/2(F02) 28/11/6/3(F03)	37/15/7/4(F02) 57/23/11/6(F03)	17/7/3/2 (F02) 28/11/6/3 (F03)	37/15/7/4 (F02) 57/23/11/6 (F03)	34/13/7/3 (F4) 16/6/3/2 (F2)	69/27/14/7 (F4) 40/16/8/4 (F2)
Storage	Industrial SD card support with health monitoring	■	■	■	■	■	■
	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	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 ▶	■ (built-in mic)/■	■ (built-in mic)/■	■ (built-in mic)/■	■ (built-in mic)/■	-	-
	Hybrid / public view monitor ▶	-/-	-/-	-/-	-/-	-/■	-/■
Housing	Weather rating ▶	-	-	-	-	IP66	IP66
	Vandal resistant	IK08	IK08	IK08	IK08	IK08	IK08
	Operating temperature ▶	-20° to +50° C (-4° to 104° F)	-20° to +50° C (-4° to 104° F)	-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)
Power input voltage	Power over Ethernet/12V/24V ▶	■/■/-	■/■/-	■/■/-	■/■/-	■/-/-	■/-/-



## IP Video

### Dome Cameras

► FLEXIDOME IP 3000i IR

► FLEXIDOME IP outdoor 4000 HD

► FLEXIDOME IP outdoor 4000 IR



1080p



5MP



non-IR



IR

■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		NDE-3502-AL	NDE-3503-AL	NDN-41012-V3	NDI-41012-V3	
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	5MP	HD 720p/1.3MP (4:3)	HD 720p/1.3MP (4:3)	
	Image sensor type ▶	1/2.8" CMOS	1/2.9" CMOS	1/2.7"	1/2.7"	
	Max. frames per second (fps) ▶	30 fps@1080p	20 fps@5.3MP 25 fps@4.1MP	30 fps@720p	30 fps@720p	
	Indoor/outdoor ▶	-/■	-/■	■/■	■/■	
	Day/night	■	■	■	■	
	Wide Dynamic Range (WDR) ▶	120dB	120dB	76dB	76dB	
	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 ▶	■	■	-	-	
	Audio detection	■	■	■	■	
Sensitivity	Minimum illumination day mode (color) ▶	0.06 lux	0.5 lux	0.24 lux	0.24 lux	
	Minimum illumination night mode (black/white) ▶	0.015 lux	0.2 lux	0.05 lux	0 lux (IR on)	
	Night vision ▶	■ (infrared)	■ (infrared)	-	■ (infrared)	
	Max. range at night ▶	30 m	30 m	-	15 m (50 ft)	
Lens	Automatic varifocal	■	■	-	-	
	Focal length ▶	3.2 - 10 mm	3.2 - 10 mm	3.3 - 10 mm	3.3 - 10 mm	
	Horizontal Angle of View (HAoV) ▶	33° - 104°	30° - 89°	35.3° - 105.5°	35.3° - 105.5°	
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) ▶	30-75/12-30/6-15/3-8	63-141/25-56/13-28/6-14	16-79/6-31/3-16/2-8	16-79/6-31/3-16/2-8	
Storage	Industrial SD card support with health monitoring	■	■	■	■	
	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 ▶	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° F)	-40° to 50° C (-22° to 122° F)	-40° to 50° C (-22° to 122° F)	
Power input voltage	Power over Ethernet / 12V / 24V	■/■/-	■/■/-	■/■/-	■/■/-	



## IP Video

### Dome Cameras

▶ FLEXIDOME IP outdoor 5000 IR

▶ FLEXIDOME IP outdoor 5000 HD

▶ FLEXIDOME IP indoor 5000 IR

▶ FLEXIDOME IP indoor 5000 HD



outdoor



Outdoor



Indoor



Indoor

■ Available – Not available

▶ = indication of main differentiator(s)

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	■	■	■	■
	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	1/2.7"	1/2.7"	1/2.7"	1/2.7"
	Max. frames per second (fps)	30 fps@1080p	30 fps@1080p	30 fps@1080p	30 fps@1080p
	Indoor / outdoor	▶ ■/■	■/■	■/-	■/-
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	76dB	76dB	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	■	■	■	■
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 lux (IR on)	0.05 lux	0 lux (IR on)	0.05 lux
	Night vision	▶ ■ (infrared)	-	■ (infrared)	-
	Max. range at night	▶ 15 m (50 ft)	-	15 m (50 ft)	-
Lens	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°	36°-117°	36°-117°
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	24-118/9-47/5-24/2-12	24-118/9-47/5-24/2-12
Storage	Industrial SD card support with health monitoring	■	■	■	■
	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	IK04	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)	-20° to 50° C (-4° to 122° F)
Power input voltage	Power over Ethernet/12V/24V	■/■/-	■/■/-	■/■/-	■/■/-



## IP Video

### Dome Cameras



■ Available – Not available  
▶ = indication of main differentiator(s)

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	■	■	■	■
	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	1/2.9"	1/2.9"	1/2.9"	1/2.9"
	Max. frames per second (fps)	30 fps@1080p	30 fps@1080p	30 fps@1080p	30 fps@1080p
	Indoor / outdoor	▶ ■/ -	■/■	■/ -	■/■
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	90dB	90dB	90dB	90dB
	ONVIF conformant	■	■	■	■
	Built-in microphone	▶ ■	-	■	-
Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	-/■	-/■
	Privacy masking	■	■	■	■
	Region Of Interest tracking	-	-	-	-
	Upright video mode	■	■	■	■
	Alarm triggering	■	■	■	■
Sensitivity	Tamper detection / Video motion detection	■	■	■	■
	Built-in video analytics	■	■	■	■
	Audio detection	■	■	■	■
	Minimum illumination day mode (color)	0.1 lux	0.1 lux	0.1 lux	0.1 lux
Lens	Minimum illumination night mode (black / white)	▶ 0.02 lux	0.02 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)
DORI distances	Automatic varifocal	■	■	■	■
	Focal length	3 - 10 mm	3 - 10 mm	3 - 10 mm	3 - 10 mm
	Horizontal Angle of View (HAoV)	34° - 101°	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	32-126/13-50/6-25/3-13
	Industrial SD card support with health monitoring	■	■	■	■
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	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
	Alarm input / output	1/1	1/1	1/1	1/1
	Audio in / out	■/■	■/■	■/■	■/■
Housing	Hybrid / public view monitor	■/■	■/■	■/■	■/■
	Weather rating	▶ -	IP66	-	IP66
	Vandal resistant	▶ IK04	IK10	IK04	IK10
Power input voltage	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 over Ethernet/12V/24V	■/■/■	■/■/■	■/■/■	■/■/■



## IP Video

### Dome Cameras



■ Available – Not available  
▶ = indication of main differentiator(s)

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	■	■	■	■
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	■/■/4 streams	■/■/4 streams	■/■/4 streams	■/■/4 streams
Basic features	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	▶ ■/-	■/■	■/-	■/■
	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	■	■	■	■
	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 varifocal	■	■	■	■
	Focal length	3 - 10 mm	3 - 10 mm	3 - 10 mm	3 - 10 mm
	Horizontal Angle of View (HAoV)	29° - 92°	29° - 92°	29° - 92°	29° - 92°
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	Industrial SD card support with health monitoring	■	■	■	■
	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

► FLEXIDOME IP starlight 6000 VR    ► FLEXIDOME IP starlight 7000 VR    ► FLEXIDOME IP starlight 6000 VR    ► FLEXIDOME IP starlight 7000 VR



720p



720p



1080p



1080p

■ Available – Not available

► = indication of main differentiator(s)

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	■	■	■	■
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	-/■/4 streams	-/■/4 streams	-/■/4 streams	-/■/4 streams
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)	60 fps@720p	60 fps@720p	60 fps@1.3MP / 1080p	60 fps@1.3MP / 1080p
	Indoor / outdoor	■/■	■/■	■/■	■/■
	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	■	■	■	■
	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 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)	16-77/6-30/3-15/2-8 (A3xx)	16-77/6-30/3-15/2-8 (A3xx) 89-203/35-80/18-41/9-20 (A10xx)	24-115/9-46/5-23/2-12 (A3xx)	24-115/9-46/5-23/2-12 (A3xx) 134-304/53-121/27-61/13-30 (A10xx)
Storage	Industrial SD card support with health monitoring	■	■	■	■
	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 8000i



1080p



6MP

4K ultra  
HD

■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		NDE-8502-R(T)	NDE-8503-R(T)	NDE-8504-R
Remote commissioning	Motorized pan/tilt/roll/zoom (PTRZ) with wireless support	■	■	■
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 ▶	HD 1080p	6MP	4K ultra HD
	Image sensor type ▶	1/2.8"	1/1.8"	1/1.8"
	Max. frames per second (fps) ▶	60	30	30
	Indoor / outdoor	■/■	■/■	■/■
	Day / night	■	■	■
	Wide Dynamic Range (WDR) ▶	134dB HDR	120dB HDR	120dB HDR
	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	■	■	■
	Audio detection	■	■	■
Sensitivity	Minimum illumination day mode (color) ▶	0.007 lux (R) / 0.013 lux (RT)	0.040 lux (R) / 0.084 lux (RT)	0.041 lux
	Minimum illumination night mode (black/white) ▶	0.0011 lux (R) / 0.0031 lux (RT)	0.0059 lux (R) / 0.0135 lux (RT)	0.0072 lux
	Night vision	■ (starlight)	■ (starlight)	■ (starlight)
	Max. range at night (IR range)	-	-	-
Lens	Automatic varifocal	■ (P-iris)	■ (P-iris)	■ (P-iris)
	Focal length ▶	3 - 9 mm (R) / 10 - 23 mm (RT)	3.9 - 10 mm (R) / 12 - 40 mm (RT)	3.9 - 10 mm
	Horizontal Angle of View (HAoV)	37° - 117° (R) / 14.4° - 32° (RT)	44° - 117° (R) / 36° - 12.6° (RT)	44° - 117°
DORI distances	Detect / Observe / Recognize / Identify (m) ▶ (Distances according to EN-IEC 62676-4 standard)	24-115/9-46/5-23/2-12 134-304/53-121/27-61/13-30	40-162/16-64/8-32/4-16 201-591/80-235/40-118/20-59	47-190/19-75/9-38/5-19
Storage	Industrial SD card support with health monitoring	■ (2 slots)	■ (2 slots)	■ (2 slots)
	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	2/1 + 12V 50mA out	2/1 + 12V 50mA out	2/1 + 12V 50mA out
	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
	Vandal resistant	IK10+	IK10+	IK10+
	Operating temperature	-50° to +60° C (-58° to +140° F)	-50° to +60° C (-58° to +140° F)	-50° to +60° C (-58° to +140° F)
Power input voltage	Power over Ethernet/12V/24V	■/■/■	■/■/■	■/■/■
Accessories	Modular mount compatible	■	■	■



## IP Video

### Dome Cameras

► FLEXIDOME IP panoramic 5000 MP

► FLEXIDOME IP panoramic 5000 MP



indoor



outdoor

■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		NUC-52051-F0	NUC-52051-F0E
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	5MP	5MP
	Image sensor type	1/3"	1/3"
	Max. frames per second (fps)	15 fps	15 fps
	Indoor / outdoor	■/-	■/■
	Day / night	■ (electronic)	■ (electronic)
	Wide Dynamic Range (WDR)	81dB	81dB
	ONVIF conformant	■	■
	Built-in microphone	■	-
Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■
	Edge dewarping	-	-
	Privacy masking	■	■
	Region Of Interest tracking	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■
	Built-in video analytics	-	-
	Audio detection	■	-
	PTZ Intelligent Tracking	-	-
Sensitivity	Minimum illumination day mode (color)	0.36 lux	0.36 lux
	Minimum illumination night mode (black/white)	0.12 lux	0.12 lux
	Night vision	-	-
	Max. range at night	-	-
Lens	Focal length	1.19 mm	1.19 mm
	Horizontal Angle of View (HAoV)	360°	360°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	19/7/4/1	19/7/4/1
Storage	Industrial SD card support with health monitoring	■	■
	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	-	-
	Hybrid / public view monitor	-	-
Housing	Weather rating	-	IP66
	Vandal resistant	▶ IK4	IK10
	Operating temperature	▶ -20° to +50° C (-4° to 104° F)	-30° to +50° C (-22° to 122° F)
Power input voltage	Power over Ethernet/12V/24V	■/■/-	■/■/-

## IP Video

### Dome Cameras

►FLEXIDOME IP panoramic 7000 MP



indoor

►FLEXIDOME IP panoramic 7000 IC



in ceiling

FLEXIDOME IP panoramic 7000



outdoor

■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		NIN-70122-Fx(A)	NFN-70122-Fx(A)	NDS-6004-FxxxE / NDS-7004-FxxxE
Video analytics at the edge	Essential Video Analytics ▶	■ (depending on model)	■ 6000 model	■ 6000 model
	Intelligent Video Analytics ▶	■ (depending on model)	■ 7000 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
Basic features	Maximum resolution	12MP	12MP	12MP
	Image sensor type	1/2.3"	1/2.3"	1/2.3"
	Max. frames per second (fps)	30 fps	30 fps	30 fps
	Indoor / outdoor	■/-	■/-	■/■
	Day / night	■	■	■
	Wide Dynamic Range (WDR)	92dB (with IAE + 16dB)	92dB (with IAE + 16dB)	92dB (with IAE + 16dB)
	ONVIF conformant	■	■	■
	Built-in microphone ▶	■	-	-
Advanced features	Intelligent Auto Exposure / Intelligent Defog	■ (customized region)/■	■ (customized region)/■	■ (customized region)/■
	Edge dewarping	■	■	■
	Privacy masking	■	■	■
	Region Of Interest tracking	■	■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■
	Built-in video analytics	■	■	■
	Audio detection ▶	■	-	-
	PTZ Intelligent Tracking	■	■	■
Sensitivity	Minimum illumination day mode (color)	0.46 lux (F1) 0.55 lux (F0)	0.46 lux (F1) 0.55 lux (F0)	0.46 lux (180° lens) 0.55 lux (360° lens)
	Minimum illumination night mode (black/white)	0.15 lux (F1) 0.18 lux (F0)	0.15 lux (F1) 0.18 lux (F0)	0.15 lux (180° lens) 0.18 lux (360° lens)
	Night vision	-	-	-
	Max. range at night	-	-	-
Lens	Focal length	2.1 mm (F1) 1.6 mm (F0)	2.1 mm (F1) 1.6 mm (F0)	2.1 mm (180° lens) 1.6 mm (360° lens)
	Horizontal Angle of View (HAAV)	180° (F1) 360° (F0)	180° (F1) 360° (F0)	180° (180° lens) 360° (360° lens)
	DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	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	Industrial SD card support with health monitoring	■	■	■
	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 (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	IK6	IK6	IK10
	Operating temperature	-20° to +40° C (-4° to 104° F)	-20° to +40° C (-4° to 104° F)	-30° to +45° C (-22° to 113° F)
Power input voltage	Power over Ethernet/12V/24V	■/-/-	■/-/-	■/-/-



## IP Video

### Fixed Cameras

►DINION IP 5000 HD



1080p

►DINION IP 5000 MP



5MP

■ Available – Not available

▶ = indication of main differentiator(s)

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	-/■/4 streams
Basic features	Maximum resolution ▶	HD 1080p	5MP
	Image sensor type ▶	1/2.7"	1/3"
	Max. frames per second (fps) ▶	30 fps@1080p	12 fps@5MP
	Indoor / outdoor	■/■ (with housing)	■/■ (with housing)
	Day / night	■	■
	Wide Dynamic Range (WDR) ▶	76dB	81dB
	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	0.35 lux
	Minimum illumination night mode (black/white)	0.05 lux	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	3.3 - 12 mm (V3)/CS mount
	Horizontal Angle of View (HAoV) ▶	34° - 110° (V3)	25° - 82° (V3)
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard) ▶	27-125/11-50/5-25/3-13 (V3)	60-234/24-93/12-47/6-23 (V3)
Storage	Industrial SD card support with health monitoring	■	■
	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	1/1	1/1
	Audio in / out	■/■	■/■
	Hybrid / public view monitor	■/■	■/■
Housing	Weather rating	-	-
	Vandal resistant	-	-
	Operating temperature	-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

### Fixed Cameras



■ Available – Not available  
▶ = indication of main differentiator(s)

Commercial Type Number		NBE-3502-AL	NBE-3503-AL	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	■	■	■	■	■
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	■/■/4 streams	■/■/4 streams	-/■/4 streams	■/■/4 streams	■/■/4 streams
Basic features	Maximum resolution ▶	HD 1080p	5MP	HD 1080p	5MP	HD 1080p
	Image sensor type ▶	1/2.8" CMOS	1/2.9" CMOS	1/2.9"	1/2.9"	1/2.8"
	Max. frames per second (fps) ▶	30 fps@1080p	20 fps@5.3MP 25 fps@4.1MP	30 fps@1080p	30 fps@5MP	60 fps@1080p
	Indoor / outdoor ▶	-/■	-/■	■/■	■/■	■/■
	Day / night	■	■	■	■	■
	Wide Dynamic Range (WDR) ▶	120dB	120dB	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	■	■	■	■	■
	Upright video mode	■	■	■	■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■	■/■
	Built-in video analytics	■	■	■	■	■
	Audio detection	■	■	■	■	■
Sensitivity	Minimum illumination day mode (color) ▶	0.06 lux	0.5 lux	0.052 lux	0.369 lux	0.0225 lux
	Minimum illumination night mode (black/white) ▶	0.015 lux	0.2 lux	0 lux (IR on)	0 lux (IR on)	0 lux (IR on)
	Night vision	■ (infrared)	■ (infrared)	■ (infrared)	■ (Infrared)	■ (Infrared)
	Max. range at night ▶	30 m	30 m	60 m (196 ft)	50 m (164 ft)	60 m (196 ft)
Lens	Automatic Back Focus (ABF)	-	-	-	-	-
	Automatic varifocal	■	■	■	■	■
	Focal length ▶	3.2 - 10 mm	3.2 - 10 mm	2.8 - 12 mm	2.7 - 12 mm	2.8 - 12 mm
	Horizontal Angle of View (HAoV) ▶	33° - 104°	30° - 89°	33° - 100°	28° - 95°	33° - 100°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard) ▶	30-75/12-30/6-15/3-8	63-141/25-56/13-28/6-14	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	Industrial SD card support with health monitoring	■	■	■	■	■
	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	IP67	IP67	IP67
	Vandal resistant	IK10	IK10	IK10	IK10	IK10
	Operating temperature	-30° to 50° C (-22° to 122° F)	-30° to 50° C (-22° to 122° 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

▶DINION IP starlight 6000 HD

▶DINION IP starlight 7000 HD

▶DINION IP starlight 6000 HD

▶DINION IP starlight 7000 HD



■ Available – Not available

▶ = indication of main differentiator(s)

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	■	■	■	■
	Compression (H.265 / H.264 & MJPEG) / multi-streaming	–/■/4 streams	–/■/4 streams	–/■/4 streams	–/■/4 streams
Basic features	Maximum resolution ▶	720p	720p	1080p	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	■/■(with housing)	■/■(with housing)	■/■(with housing)	■/■(with housing)
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR)	120dB	120dB	120dB	120dB
	ONVIF conformant	■	■	■	■
Advanced features	Built-in microphone	–	–	–	–
	Intelligent Auto Exposure / Intelligent Defog	■/■	■/■	■/■	■/■
	Privacy masking	■	■	■	■
	Region Of Interest tracking	■	■	■	■
Alarm triggering	Upright video mode	■	■	■	■
	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	■	■	■	■
Sensitivity	Audio detection	■	■	■	■
	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)
Lens	Max. range at night	–	–	–	–
	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 (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	Industrial SD card support with health monitoring	■	■	■
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	Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting
	Alarm input / output	2/1	2/1	2/1	2/1
	Audio in / out	■/■	■/■	■/■	■/■
Housing	Hybrid / public view monitor	■/■	■/■	■/■	■/■
	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
Power input voltage	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 over Ethernet/12V/24V	■/■/–	■/■/–	■/■/–	■/■/–

\*\* Lens not included

## IP Video

### Fixed Cameras

►DINION IP starlight 8000 MP

►DINION IP ultra 8000 MP



starlight

4K ultra  
HD

■ Available – Not available

▶ = indication of main differentiator(s)

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	■/■ (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
	Minimum illumination night mode (black/white) ▶	0.004 lux (5 MP) 0.0028 lux (1080p)	0.037 lux
	Night vision ▶	■ (starlight)	-
	Max. range at night	-	-
Lens	Automatic Back Focus (ABF)	■	■
	Automatic varifocal	-	-
	Focal length ▶	C/CS mount 4.1-9 mm/12.5-50 mm	C/CS mount - 35 mm/50 mm/75 mm fixed iris P-iris lens 4-13 mm
	Horizontal Angle of View (HAoV)	Depending on optional lens	Depending on optional lens
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	Depending on optional lens	Depending on optional lens
	Storage	■	■
Connections	Industrial SD card support with health monitoring	■	■
	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
	Alarm input / output	2/1	2/1
Housing	Audio in / out	■/■	■/■
	Hybrid / public view monitor	■/■	■/■
	Weather rating	-	-
Power input voltage	Vandal resistant	-	-
	Operating temperature	-20° to 50° C (-4° to 122° F)	-20° to 50° C (-4° to 122° F)
	Power over Ethernet/12V/24V	■/■/-	■/■/-

\*\* lens not included



## IP Video

### Specialty Cameras

►DINION IP imager 9000 HD



►FLEXIDOME IP corner 9000 MP



■ Available – Not available

Commercial Type Number		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
Basic features	Maximum resolution	HD 1080p	1080p
	Image sensor type	1/2.7"	1/2.7"
	Max. frames per second (fps)	30 fps@1080p	30 fps@1080p
	Indoor / outdoor	-/■	■/-
	Day / night	■	■
	Wide Dynamic Range (WDR)	76dB (with IAE +16dB)	76dB
	ONVIF conformant	■	■
	Built-in microphone	-	-
	Intelligent Auto Exposure / Intelligent Defog	■/-	-/-
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)	0.4 lux	0.3 lux
Sensitivity	Minimum illumination night mode (black/white)	0 lux (IR on)	0 lux (IR on)
	Night vision	■ (infrared)	■ (infrared)
	Max. range at night	120 m (394 ft)	9 m (30 ft)
	Automatic Back Focus (ABF)	■	-
Lens	Automatic varifocal	■	-
	Focal length	10 - 23 mm	2 mm
	Horizontal Angle of View (HAoV)	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
Storage	Industrial SD card support with health monitoring	■	■
	Cloud application storage	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	IP66	IP65
	Vandal resistant	IK10	IK10
	Operating temperature	-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 8000



■ Available – Not available  
▶ = indication of main differentiator(s)

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	-/■/4 streams
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	■/■	■/■
	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	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	-	-
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) ▶	7.5 mm: 41.8°, 19 mm: 16°	9 mm: 70°, 16.7 mm: 37.5°, 35 mm: 17.6°, 65 mm: 9.6°
DRI distances	Detection / Recognition / Identification ▶	7.5 mm: 140 m (459 ft) / 35 m (115 ft) / 18 m (59 ft)	9 mm: 155 m (509ft) / 40 m (131 ft) / 20 m (66 ft)
		19 mm: 380 m (1247 ft) / 95 m (312 ft) / 48 m (157 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	Industrial SD card support with health monitoring	■	■
	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)
Power input voltage	Power over Ethernet/12V/24V	-/-/■	-/-/■

## IP Video

### Moving Cameras

#### ▶AUTODOME IP 4000i

#### ▶AUTODOME IP 5000i

#### ▶AUTODOME IP 5000i IR



In-ceiling



12x zoom



In-ceiling



30x zoom



IR

■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		NDP-4502-Z12C	NDP-4502-Z12	NDP-5502-Z30C	NDP-5502-Z30	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	■/■/4 streams	
Basic features	Maximum resolution	HD 1080p	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	1/2.8" CMOS	
	Max. frames per second (fps)	60 fps@1080p	60 fps@1080p	60 fps@1080p	60 fps@1080p	60 fps@1080p	
	Indoor / outdoor	▶ ■/-	■/-	■/-	■/■	■/■	
	Day / night	■	■	■	■	■	
	Wide Dynamic Range (WDR)	94dB	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	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	0.05 lux	
	Minimum illumination night mode (black/white)	▶ 0.01 lux	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	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°	2.4° to 60.9°	
	PTZ Zoom optical/digital	▶ 12x/16x	12x/16x	30x/16x	30x/16x	30x/16x	
	Tilt angle	▶ -90° to 0°	-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	65-1833/26-727/13-367/7-183	
Storage	Industrial SD card support with health monitoring	■	■	■	■	■	
	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	2/1	2/1	2/1	2/1	2/1	
	Audio in / out	■/■	■/■	■/■	■/■	■/■	
	Hybrid / public view monitor	-/-	-/-	-/-	-/-	-/-	
Housing	Weather rating	▶ IP51	IP65	IP51	IP66	IP66	
	Vandal resistant	▶ IK6	IK10	IK6	IK10	-	
	Operating temperature	▶ -10° to 55° C (14° to 131° F)	-10° to 55° C (14° to 131° F)	-10° to 60° C (14° 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/24Vac	■ (PoE+)/-/■	■ (PoE+)/-/■	■ (PoE+)/-/■	■ (PoE+)/-/■	■ (PoE+)/-/■	



## IP Video

### Moving Cameras

▶AUTODOME IP starlight 5000i

▶AUTODOME IP starlight 5000i IR



Inceiling

30x  
zoom

IR

■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		NDP-5512-Z30C	NDP-5512-Z30	NDP-5512-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
Basic features	Maximum resolution	HD 1080p	HD 1080p	HD 1080p
	Image sensor type	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
	Indoor / outdoor	▶ ■/-	■/■	■/■
	Day / night	■	■	■
	Wide Dynamic Range (WDR)	120dB	120dB	120dB
	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
	Wiper	-	-	-
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■
	Built-in video analytics	■	■	■
	Audio detection	■	■	■
	PTZ Intelligent Tracking	-	-	-
Sensitivity	Minimum illumination day mode (color)	0.0186 lux	0.0186 lux	0.0186 lux
	Minimum illumination night mode (black/white)	▶ 0.004 lux	0.004 lux	0 lux (IR on)
	Night vision	▶ -	-	■ (infrared)
	Max. range at night	▶ -	-	180m (590 ft)
Lens	Focal length	4.5 - 135 mm	4.5 - 135 mm	4.5 - 135 mm
	Horizontal Angle of View (HAoV)	2.4° to 60.9°	2.4° to 60.9°	2.4° to 60.9°
	PTZ Zoom optical/digital	30x/16x	30x/16x	30x/16x
	Tilt angle	▶ -90° to 0°	-90° to 0°	-90° to 3°
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	65-1833/26-727/13-367/7183	65-1833/26-727/13-367/7183	65-1833/26-727/13-367/7183
Storage	Industrial SD card support with health monitoring	■	■	■
	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	2/1	2/1	2/1
	Audio in / out	■/■	■/■	■/■
	Hybrid / public view monitor	-/-	-/-	-/-
Housing	Weather rating	▶ IP55	IP66	IP66
	Vandal resistant	▶ IK06	IK10	-
	Operating temperature	▶ -10° to 60° C (14° F to 140° F)	-40° to 60° C (-40° F to 140° F)	-40° to 60° C (-40° F to 140° F)
Power input voltage	Power over Ethernet/12V/24Vac	■ (PoE+)/-/■	■ (PoE+)/-/■	■ (PoE+)/-/■

## IP Video

### Moving Cameras

▶AUTODOME IP starlight 7000 HD

▶AUTODOME IP starlight 7000i



H.265

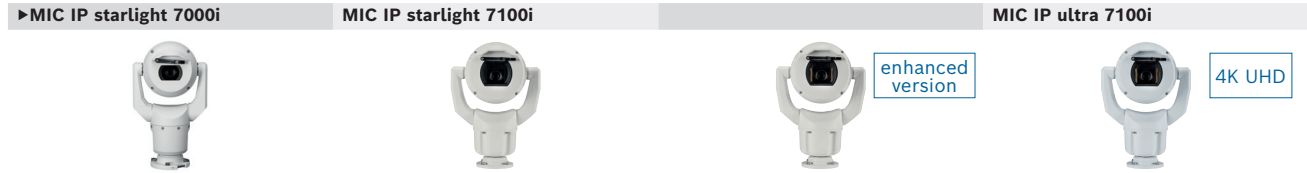
■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		VG5-7230	NDP-7512
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 1080p	HD 1080p
	Image sensor type	1/2.8"	1/2.8"
	Max. frames per second (fps)	60 fps@720p 30 fps@1080p	60 fps@720p 30 fps@1080p
	Indoor / outdoor	■/■	■/■
	Day / night	■	■
	Wide Dynamic Range (WDR)	120dB	120dB
	ONVIF conformant	■	■
	Built-in microphone	–	–
Advanced features	Intelligent Auto Exposure / Intelligent Defog	–/■	–/■
	Privacy masking	■	■
	Nbr of presets/guard tours	256/2	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)	0.0077 lux	0.0077 lux
	Minimum illumination night mode (black/white)	0.0008 lux	0.0008 lux
	Night vision	■ (starlight)	■ (starlight)
	Max. range at night	–	–
Lens	Focal length	4.3 - 129 mm	4.3 - 129 mm
	Horizontal Angle of View (HAoV)	2.3° to 63.7°	2.3° to 64.7°
	PTZ Zoom optical/digital	30x/12x	30x/12x
	Tilt angle	-90° to 14° (pendant)	-90° to 14° (pendant)
DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard)	62-1913/25-759/12-383/6-191	61-1913/24-765/12-383/6-191
Storage	Industrial SD card support with health monitoring	■	■
	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	7/4	7/4
	Audio in / out	■/■	■/■
	Hybrid / public view monitor	–/–	–/–
Housing	Weather rating	IP66 (pendant)/IP54 (in-ceiling)	IP66 (pendant)/IP54 (in-ceiling)
	Vandal resistant	IK10 (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)
Power input voltage	Power over Ethernet/12V/24Vac	■ (HiPoE)/–/■ (pendent) ■ (PoE+)/–/■ (In ceiling)	■ (HiPoE)/–/■ (pendent) ■ (PoE+)/–/■ (In ceiling)

## IP Video

### Moving Cameras



■ Available – Not available  
▶ = indication of main differentiator(s)

Commercial Type Number		MIC7502-Z30x	MIC-7522-Z30x	MIC-7522-Z30xR	MIC-7505-Z12xR
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	4K UHD
	Image sensor type ▶	1/2.8"	1/2"	1/2"	1"
	Max. frames per second (fps) ▶	60 fps@1080p	60 fps@ 1080p	60 fps@ 1080p	30 fps@ UHD
	Indoor / outdoor	-/■	-/■	-/■	-/■
	Day / night	■	■	■	■
	Wide Dynamic Range (WDR) ▶	120dB	120dB	120dB	62dB
	ONVIF conformant	■	■	■	■
Advanced features	Intelligent Auto Exposure / Intelligent Defog	-/■	-/■	-/■	-/■
	Privacy masking	■	■	■	■
	Nbr of presets/guard tours	256/2	256/2	256/2	265/2
	Wiper / Built in window defroster ▶	■/-	■/-	■/■	■/■
	Intelligent Tracking	■	■	■	■
Alarm triggering	Tamper detection / Video motion detection	■/■	■/■	■/■	■/■
	Built-in video analytics	■	■	■	■
	Audio detection ▶	■ (with VJC-7000-90)	■	■	■
	PTZ Intelligent Tracking	■	■	■	■
Sensitivity	Minimum illumination day mode (color) ▶	0.0077 lux	0.0047 lux	0.0047 lux	0.292 lux
	Minimum illumination night mode (black/white) ▶	0.0008 lux	0.0013 lux	0.0013 lux	0.0110 lux
	Night vision	■ (optional illuminator)	■ (optional illuminator)	■ (optional illuminator)	■ (optional illuminator)
	Max. range at night ▶	450 m (1476 ft)	550 m (1804.5 ft)	550 m (1804.5 ft)	300 m (984.25 ft)
Lens	Focal length ▶	4.3 - 129 mm	6.6 - 198 mm	6.6 - 198 mm	9.3 - 111.6 mm
	Horizontal Angle of View (HAoV) ▶	2.3° to 63.7°	2.1° to 58.3°	2.1° to 58.3°	6.1° to 64.6°
	PTZ Zoom optical/digital ▶	30x/12x	30x/12x	30x/12x	12x/12x
	Tilt angle ▶	-58° to 90° (upright), -90° to 90° (canted)	-55° to 90° (upright), -80° to 90° (canted)	-55° to 90° (upright), -80° to 90° (canted)	-55° to 90° (upright), -80° to 90° (canted)
	DORI distances	Detect / Observe / Recognize / Identify (Distances according to EN-IEC 62676-4 standard) ▶	wide 62-1913/25-759/12-383/6-191 tele 1913-6276/765-2510/383- 1255/191-628	wide 69-226/27-89/14-46/7-23 tele 2895-6873/834-2726/419- 1375/210-689	wide 69-226/27-89/14-46/7-23 tele 2895-6873/834-2726/419- 1375/210-689
Storage	Memory card slot ▶	■ (up to 32 GB) (with VJC-7000-90)	■ (up to 32 GB) (with VJC-7000-90)	■ (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	5/3 (with MIC-ALM-WAS-24)	5/3 (with MIC-ALM-WAS-24)	5/3 (with MIC-ALM-WAS-24)	5/3 (with MIC-ALM-WAS-24)
	Audio in / out ▶	■/- (with VJC-7000-90)	■	■	■
	Hybrid / public view monitor	■ (with external decoder)/-	■ (with external decoder)/-	■ (with external decoder)/-	■ (with external decoder)/-
Housing	Weather rating	IP68	IP68	IP68	IP68
	Vandal resistant	IK10	IK10	IK10	IK10
	Operating temperature	-40° to 65° C (-40° F to 149° F)	-40° C to +65° C (-40° F to +149° F)	-40° C to +65° C (-40° F to +149° F)	-40° C to +65° C (-40° F to +149° F)
Power input voltage	Power over Ethernet/12V/24Vac	■ (HiPoE)/-/■	■ (PoE+/-)/-/■	■ (PoE+/-)/-/■	■ (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	-/■	
	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° tp +90° (upright), -90° to +56° (inverted)	
	DORI distances	62-1913/25-765/12-383/6-191 (Distances according to EN-IEC 62676-4 standard)	
Storage	Internal storage	■ (16 GB)	
	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 Recording

#### All-in-one solution

▶DIVAR IP all-in-one 5000

▶DIVAR IP all-in-one 7000 2U

▶DIVAR IP all-in-one 7000 3U



■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		DIP-524xxx-xxx	DIP-728x-xxx	DIP-72Gx-xxx
Basic functions	Max. system size (channels)	▶ 42	256	256
	Integrated video management	■	■	■
	RAID Level	▶ –	RAID-5, RAID-6	RAID-5, RAID-6
	Supported resolutions	CIF/2CIF/4CIF/720p/1080p/5MP/UHD	CIF/2CIF/4CIF/720p/1080p/5MP/UHD	CIF/2CIF/4CIF/720p/1080p/5MP/UHD
	Video compression	H.264, H.265, MPEG-4, ONVIF, RTSP, JPEG	H.264, H.265, MPEG-4, ONVIF, RTSP, JPEG	H.264, H.265, 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)	▶ 2x Gigabit Ethernet	2x Gigabit Ethernet, 1x 100Mbit (Mgmt)	2x Gigabit Ethernet, 1x 100Mbit (Mgmt)
	USB ports	▶ 4x USB	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 HDMI2.0, 1 DP, 1 DVI-D (GPU models: 4x mini-DP)	VGA (optional: 4x mini-DP)	VGA (optional: 4x mini-DP)
	Monitor output	▶ 3 (GPU-models: 4)	optional: 4x via local mini-DP	optional: 4x via local mini-DP
Audio	In/out channels	42	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	4, 8 or 12 TB	4, 8 or 12 TB	4, 8 or 12 TB
	Base system capacity TB	▶ 0, 16, 32 or 48 TB	0, 32, 64 or 96 TB	0, 64, 128 or 192 TB
	Max. Base system capacity TB	▶ 48 TB	96 TB	192 TB
	Full system capacity TB	▶ 144 TB	864 TB	960 TB
	Extensible/external support	iSCSI	iSCSI	iSCSI
Storage extensions	Max. number of units	▶ 2x DIVAR IP all-in-one 5000 configured as storage extension	4x DIVAR IP all-in-one 7000 configured as storage extension	4x DIVAR IP all-in-one 7000 configured as storage extension
	Maximum drives supported	▶ 4	8	16
	Available capacities per drive	▶ 0, 16, 32 or 48 TB	4, 8 or 12 TB	4, 8 or 12 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

## IP Video

### Digital Recording

#### All-in-one solution

►DIVAR IP all-in-one 5000

►DIVAR IP all-in-one 7000 2U

►DIVAR IP all-in-one 7000 3U



■ Available – Not available  
▶ = indication of main differentiator(s)

Commercial Type Number		DIP-524xxx-xxx	DIP-728x-xxx	DIP-72Gx-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	4
Advanced features support	Forensic search support (metadata)	■	■	■
	Webclient	■	■	■
Supported software	Bosch Video Client	-	-	-
	Bosch Video Management System	■ (v9.0 or newer)	■ (v9.0 or newer)	■ (v9.0 or newer)
	3rd Party software	-	-	-
3rd party integration tools	Optional ATM/POS integration	■	■	■
	SDK (IPP*)	■	■	■

\* Integration Partner Program (IPP) for more information visit <https://www.boschsecurity.com/xc/en/partners/>



## IP Video Digital Storage

### Network Video Recorder ► DSA E-Series



■ Available – Not available

Commercial Type Number	DSA-N6xxxx-xxxx	
Basic functions	Max. system size (channels)	800
	Integrated video management	–
	RAID Level	RAID-5/RAID-6/DDP
	Supported resolutions	CIF/2CIF/4CIF/720p/1080p/5MP
	Video compression	H.264, H.265, MPEG-4, ONVIF, RTSP, JPEG
	Transcoding	–
	ONVIF	■
Mechanical	Form factor	2U/4U 19-inch Rack Mount
	Network connections (LAN)	2x Gigabit Ethernet/ 2x 10 Gigabit Ethernet
	USB ports	–
	Number of power supplies	2
	Power supplies hot swappable	■
Video output	Connector type	–
	Monitor output	–
Audio	In/out channels	800 (audio playback via remote station only)
	Compression type	G.726
	Synchronous audio	■
	Associate multiple cameras to 1 Audio	■
Recording	Video Recording Manager (VRM)	–
	Schedule recording modes	■
Storage options	Max. drives supported	12/60
	Available capacities per drive	4, 8 or 12 TB
	Base system capacity TB	–
	Max. Base system capacity TB	12 bay: 48/96/144 TB 60 bay: 240/480/720 TB
	Full system capacity TB	12 bay: 384/768/1152 TB 60 bay: 720/1440/2160 TB
	Extensible/external support	6Gb/s SAS (Copper)
Storage extensions	Max. number of units	12 bay: 7 / 60 bay: 3
	Maximum drives supported	12/60 **
	Available capacities per drive	4, 8 or 12 TB
	Hot swappable	■
Export/back-up of data	Data format	WMF, Bosch ASF
	Built-in DVD writer	–
	Supported devices	External CD/DVD Writer, USB 2.0, iSCSI
	Back-up mode	manual or automatic
Redundancy	Power supply redundancy	■
	Hot swappable HDD	■

Table continued on the next page

## IP Video Digital Storage

### Network Video Recorder ► DSA E-Series



■ Available – Not available

Commercial Type Number		DSA-N6xxxx-xxxx
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)	–
	Network	2x 10 Gigabit Ethernet
	Web browser access	–
	Simultaneous accessible users	–
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*)	–

\* Integration Partner Program (IPP) for more information visit <https://www.boschsecurity.com/xc/en/partners/>

## IP Video Digital Storage

### Network Video Recorder

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



■ Available – Not available  
▶ = indication of main differentiator(s)

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, H.265, MPEG-4	H.264, H.265, MPEG-4	H.264, H.265, MPEG-4
	Transcoding	–	–	–
	Bosch IP native camera integration	■	■	■
Mechanical	ONVIF	■	■	■
	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+
Video output	USB ports	▶ 1x USB 2.0, 1xUSB 3.0	1x USB 2.0, 1xUSB 3.0	1x USB 2.0, 2xUSB 3.0
	Connector type	VGA, HDMI	VGA, HDMI	VGA, HDMI
Audio	Spotmonitor	–	–	■ (HDMI)
	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	■	■	■
Storage options	Associate multiple cameras to 1 Audio	–	–	–
	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
Storage extensions	Extensible/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	1, 2, 3, 4 or 6TB
Export/back-up of data	Hot swappable	–	–	–
	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
Redundancy	Back-up mode	manual or automatic	manual or automatic	manual or automatic
	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	-	-	-

\* Integration Partner Program (IPP) for more information visit <https://www.boschsecurity.com/xc/en/partners/>

## IP Video

### Digital Storage

#### Hybrid Network Video Recorder

►DIVAR hybrid 3000      ►DIVAR hybrid 5000



■ Available – Not available

► = indication of main differentiator(s)

Commercial Type Number		DDH-3532-xxx00	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 / 3	16 / 6
	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, H.265, MPEG-4	H.264, H.265, MPEG-4
	Transcoding	-	-
	Bosch IP native camera integration	■	■
	ONVIF	■	■
Mechanical	Form factor	► 1U high Desktop	1.5U high Rack Mount
	Network connections (LAN)	2x Gigabit Ethernet	2x Gigabit Ethernet
	Build-in PoE+	-	-
	USB ports	1x USB 2.0, 2xUSB 3.0	1x USB 2.0, 2xUSB 3.0
Video output	Connector type	VGA, HDMI	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  
▶ = indication of main differentiator(s)

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
	Extensible/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 <https://www.boschsecurity.com/xc/en/partners/>

## IP Video Video Software

### Video Management System



■ Available – Not available  
▶ = indication of main differentiator(s)

Name		BVMS Viewer	BVMS Plus	BVMS Professional	BVMS Enterprise
System features	Included cameras (max cameras)	▶ 16 (500)	8 (256)	8 (2000)	200.000
	Maximum number of clients	▶ 1	10	100	100
	Maximum number of Bosch Video Management System (VMS) servers	▶ 1	1	1	10/30
	Maximum number of Bosch Video Recording Manager (VRM) servers	▶ 32**	2	125	1.250
	Maximum storage capacity	▶ n.a.	2x 2 PB	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	▶ -	■	■	■
	Integration	▶ Maximum number of Bosch B/G Series intrusion panels	-	10	20
	▶ I/O module support	-	■	■	■
	▶ Active directory connectivity	■	■	■	■
	▶ ATM-POS support	-	■	■	■
	▶ Additional data	-	■	■	■
	▶ Software Development Kit (SDK)	-	■	■	■

\* additional hardware required

## IP Video

### Viewing Software

▶Video Security App

▶Video Security Client

▶Advanced Viewing Client



■ Available – Not available

▶ = indication of main differentiator(s)

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

### ►VIDEOJET multi 4000



■ Available – Not available

Commercial Type Number		VJM-4016
	Description	16 Channel H.264 Video Encoder
Video/Audio	Camera Inputs	16
	Video Codec	H.264 High Profile
	Max. frames per second (fps)	25/30@4CIF
	Audio in / out	2/1
	Transcoding at the edge	–
Intelligence	Direct-to-iSCSI	■
	Video Analytics	Motion+
Interfaces	Alarm In	4
	Relay Out	1
	ONVIF conformant	■

## IP Video Decoders

### ►VIDEOJET decoder 3000

### ►VIDEOJET decoder 7000



■ Available – Not available

▶ = indication of main differentiator(s)

Commercial Type Number		VJD-3000	VJD-7513
	Description ▶	Single/Quad-stream Decoder	High performance H.265 UHD decoder
Video/Audio	Monitor Outputs ▶	1 of 2 (HDMI, CVBS)	2 (HDMI, DP via USB-C)
	Video Codec ▶	H.264 M-JPEG, JPEG	H.265, H.264, MPEG-4, MPEG-2
	Max. frames per second (fps) ▶	30@1080p (single view) 60@720p (single view) 4x 25/30@4CIF (quad view)	4x 30@UHD* 10x 60@1080p* 18x 60@720p* 28x 60@432p*
	Audio in / out ▶	1/1	via HDMI
	Transcoding at the edge	–	–
Interfaces	Alarm In ▶	4	–
	Relay Out ▶	1	–
	ONVIF conformant	–	–
Other	Keyboard ▶	■	supported for IP Matrix
	IP Matrix	■	■

\* at 25 °C with a single HD monitor connected

## 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

► = indication of main differentiator(s)

Commercial Type Number		UML-193-90	UML-223-90	UML-274-90	UML-324-90	UML-434-90	UML-554-90
Display	Type	19" LED	22" LED	27" LED	32" LED	43" LED	55" LED
	Max Pixel Resolution	1366 x 768	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	3840x2160
	Aspect Ratio	16:9	16:9	16:9	16:9	16:9	16:9
	Brightness (cd/m2)	250	250	350	500	400	450
	Contrast Ratio	1000:1	1000:1	3000:1	3000:1	3000:1	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°
PC Compatible		■	■	■	■	■	■
Connectors	Composite Video (BNC)	–	–	Na	Na	Na	Na
	VGA	■	■	■	■	■	■
	DVI-D	■	■	■	■	■	■
	HDMI	■	■	■	■	■	■
	Display Port			■	■	■	■
Audio	Input	■	■	■	■	■	■
	Speaker	■	■	■	■	■	■
Mechanical	Width	448 mm	515 mm	633,6 mm	747,9 mm	978,3 mm	1253,8 mm
	Height	332 mm*	370 mm*	371,8 mm	431,5 mm	568,8 mm	722,6 mm
	Depth	182 mm*	182 mm*	64,8 mm	71,5 mm	74,7 mm	74,1 mm
	Weight	3.0 kg	3.6 kg	6,8 kg	11.6 kg	18,6 kg	30,5 kg
Power	Power Supply	integrated	integrated	integrated	integrated	integrated	integrated
	Power Consumption	42W	42W	50W	60W	75W	155W
Misc.	Picture-in-picture	–	–	Na	Na	Na	Na
	Front Panel Lockout	■	■	Na	Na	Na	Na
	IR Remote	–	–	■	■	■	■
Cables Included	VGA-to-VGA	■	■	■	■	■	■
	HDMI-to-HDMI	►		■	■	■	■
	DVI-to-DVI	►	■	Na	Na	Na	Na
	DP-to-DP	►		■	■	■	■
	DP-to-MiniDP converter	►		■	■	■	■
Mounting	VESA Compliant	■	■	■	■	■	■
	Rack-mountable	►	–	Na	Na	Na	Na
	Fixed desktop stand	►	–	within box	within box	within box	within box
	Adjustable desktop stand	►	■	UMM-LED27-SD	NA	NA	NA
	Fixed Wall Mount	►	–	NA	NA	ST650	ST650
	Swivel/Tilt Wall Mount	►	–	UMM-LW-30B	UMM-WMT-32	NA	NA




### **Bosch Security and Safety Systems**

Protecting lives, buildings and assets is our aim. Our product portfolio includes video security, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. Professional audio and conference systems for communications of voice, sound and music complete the range.

### **Bosch Security and Safety Systems**

To learn more about Video Systems please visit [www.boschsecurity.com](http://www.boschsecurity.com)

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