

Our focus is innovating security
where you need it most



IP Video product overview
June 2016



BOSCH
Invented for life

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Added value for you

Intelligent Dynamic Noise Reduction

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

Intelligent Auto Exposure

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

Intelligent Tracking

In video surveillance, moving objects are usually the most significant objects of interest. Intelligent Tracking automatically tracks moving objects based on predefined alarm rules or a simple click. By intelligently distinguishing between single and multiple reference points, Intelligent Tracking will

provide uninterrupted tracking. Optimal capture of the object of interest is assured by dynamically adjusting the field of view. With Intelligent Tracking, our focus is never to lose track of objects of interest.

Intelligent video analytics at the edge

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

Essential Video Analytics

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

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

Intelligent Video Analytics

Can do everything that Essential Video Analytics does. It is specifically designed for the most demanding environments. It delivers

the highest levels of accuracy for mission critical applications such as:

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

starlight

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

Back in 2012, Bosch introduced the world's first starlight cameras. Designed to give excellent images, even in the lowest light conditions, they revolutionized the industry and created true 24/7 surveillance.

The latest sensor technology, combined with sophisticated noise suppression, results in a light sensitivity of 0.00825 lux in color and 0.00275 lux in monochrome. This enables starlight cameras to produce full color images in the dark beyond the point where other cameras have switched

to monochrome. Where other cameras fail to show any image at all, starlight cameras are still capable of delivering detailed monochrome images.

4K ultra HD

Covering a large area and identifying objects at a great distance is challenging. That's why the 4K ultra HD technology in our DINION IP ultra 8000 MP offers 12 megapixel resolution to deliver amazing detail even when zoomed-in. With an incredibly high frame rate of 20 frames per second for a 12 megapixel camera, you can capture fast moving objects in high resolutions. This speed and these resolutions provide the level of detail that makes the difference when collecting evidence. The images produced are perfect for a detailed and effective retrospective analysis. The camera's ability to give a wide-angle overview and multiple focus points on a single screen helps you focus on details without losing the bigger picture. With the DINION IP ultra 8000 MP, our focus is to enable you to see every detail, everywhere.

IP Video

Dome Cameras

► FLEXIDOME IP micro 2000

► FLEXIDOME IP micro 5000



■ Available – Not available

| Commercial Type Number | | NUC-21002-F2 | NUC-21012-F2 | NUC-51022-Fxx | NUC-51051-Fxx |
|---------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | -/- | -/- | -/- | -/- |
| | starlight (extreme low-light sensitivity) | - | - | - | - |
| | 4K ultra HD | - | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - | - |
| | Intelligent Video Analytics | - | - | - | - |
| Basic features | Maximum resolution | VGA | HD 720p | HD 1080p | 5 MP |
| | Image sensor type | 1/4" | 1/4" | 1/2.7" | 1/3" |
| | Max. frames per second (fps) | 30 fps@ 480p | 30 fps@ 720p | 30 fps@ 1080p | 12 fps@ 5MP |
| | Indoor / outdoor / in-vehicle | ■/-/- | ■/-/- | ■/■/■ | ■/■/■ |
| | Day / night | ■ (electronic) | ■ (electronic) | ■ (electronic) | ■ (electronic) |
| | Wide Dynamic Range (WDR) | 76dB | 76dB | 76dB | 65dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | ■ | ■ | - | - |
| | Power over Ethernet (PoE) | ■ | ■ | ■ | ■ |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | ■ | ■ |
| | Region Of Interest tracking | - | - | - | - |
| | Alarm triggering | ■/■ | ■/■ | ■/■ | ■/■ |
| Sensitivity | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | - | - | - | - |
| | Audio detection | ■ | ■ | - | - |
| Minimum illumination day mode (color) | Minimum illumination day mode (color) | 1 lux | 1 lux | 0.4 lux (F4) 1 lux (F2/F2M) | 0.8 lux (F4) 2 lux (F2/F2M) |
| | Minimum illumination night mode (black/white) | - | - | 0.4 lux (F4) 1 lux (F2/F2M) | 0.8 lux (F4) 2 lux (F2/F2M) |
| | Night vision | - | - | - | - |
| | Max. range at night | - | - | - | - |
| Lens | Automatic Back Focus (ABF) | - | - | - | - |
| | Automatic varifocal | - | - | - | - |
| | Focal length | 2.5 mm | 2.5 mm | 3.6 mm (F4) 2.5 mm (F2/F2M) | 3.6 mm (F4) 2.5 mm (F2/F2M) |
| | Horizontal Angle of View (HAoV) | 66.7° | 89° | 97° (F4) 135° (F2/F2M) | 74° (F4) 105° (F2/F2M) |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 24/10/5/2 | 26/10/5/3 | 34/13/7/3 (F4) 16/6/3/2 (F2) | 69/27/14/7 (F4) 40/16/8/4 (F2) |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | -/- | -/- | -/- | -/- |
| | Audio in / out | - | - | - | - |
| | Hybrid* / confrontation monitor | -/■ | -/■ | -/■ | -/■ |
| Housing | Weather rating | - | - | IP66 | IP66 |
| | Vandal resistant | - | - | IK08 | IK08 |
| | Operating temperature | -20° to 50° C (-4° to 122° F) | -20° to 50° C (-4° to 122° F) | -30° to 50° C (-22° to 122° F) | -30° to 50° C (-22° to 122° F) |

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

IP Video

Dome Cameras

► FLEXIDOME IP indoor 4000 HD

► FLEXIDOME IP indoor 4000 IR

► FLEXIDOME IP outdoor 4000 HD

► FLEXIDOME IP outdoor 4000 IR



■ Available – Not available

| Commercial Type Number | | NIN-41012-V3 | NII-41012-V3 | NDN-41012-V3 | NDI-41012-V3 |
|-----------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | - / ■ | - / ■ | - / ■ | - / ■ |
| | starlight (extreme low-light sensitivity) | - | - | - | - |
| | 4K ultra HD | - | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - | - |
| | Intelligent Video Analytics | - | - | - | - |
| Basic features | Maximum resolution | HD 720p/1.3 MP (4:3) | HD 720p/1.3 MP (4:3) | HD 720p/1.3 MP (4:3) | HD 720p/1.3 MP (4:3) |
| | Image sensor type | 1/2.7" | 1/2.7" | 1/2.7" | 1/2.7" |
| | Max. frames per second (fps) | 30 fps@ 720p | 30 fps@ 720p | 30 fps@ 720p | 30 fps@ 720p |
| | Indoor / outdoor / in-vehicle | ■ / - / - | ■ / - / - | ■ / ■ / - | ■ / ■ / - |
| | Day / night | ■ | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 76dB | 76dB | 76dB | 76dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | ■ | ■ | - | - |
| | Power over Ethernet (PoE) | ■ | ■ | ■ | ■ |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | ■ | ■ |
| | Region Of Interest tracking | - | - | - | - |
| | Alarm triggering | ■/■ | ■/■ | ■/■ | ■/■ |
| Sensitivity | Built-in video analytics | - | - | - | - |
| | Audio detection | ■ | ■ | ■ | ■ |
| | Minimum illumination day mode (color) | 0.24 lux | 0.24 lux | 0.24 lux | 0.24 lux |
| Lens | Minimum illumination night mode (black/white) | 0.05 lux | 0 lux (IR on) | 0.05 lux | 0 lux (IR on) |
| | Night vision | - | ■ (infrared) | - | ■ (infrared) |
| | Max. range at night | - | 15 m (50 ft) | - | 15 m (50 ft) |
| | Automatic Back Focus (ABF) | - | - | - | - |
| DORI distances | Automatic varifocal | - | - | - | - |
| | Focal length | 3.3 - 10 mm | 3.3 - 10 mm | 3.3 - 10 mm | 3.3 - 10 mm |
| | Horizontal Angle of View (HAoV) | 35.3° - 105.5° | 35.3° - 105.5° | 35.3° - 105.5° | 35.3° - 105.5° |
| Storage | DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 16-79/6-31/3-16/2-8 | 16-79/6-31/3-16/2-8 | 16-79/6-31/3-16/2-8 |
| | Memory card slot | ■ (up to 2 TB) | ■ (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 | 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* / confrontation monitor | ■/■ | ■/■ | ■/■ | ■/■ |
| | Weather rating | - | - | IP66 | IP66 |
| | Vandal resistant | - | - | IK10 | IK10 |
| Operating temperature | | -20° to 50° C (-4° to 122° F) | -20° to 50° C (-4° to 122° F) | -40° to 50° C (-22° to 122° F) | -40° to 50° C (-22° to 122° F) |

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IP Video

Dome Cameras

►FLEXIDOME IP indoor 5000 HD

►FLEXIDOME IP indoor 5000 MP



■ Available – Not available

| Commercial Type Number | | NIN-51022-V3 | NIN-50022-A3 | NIN-50051-A3 |
|-----------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog starlight (extreme low-light sensitivity) | - / ■ | - / ■ | - / ■ |
| | 4K ultra HD | - | - | - |
| | | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - |
| | Intelligent Video Analytics | - | - | - |
| Basic features | Maximum resolution | HD 1080p | HD 1080p | 5MP |
| | Image sensor type | 1/2.7" | 1/2.7" | 1/3" |
| | Max. frames per second (fps) | 30 fps@ 1080p | 30 fps@ 1080p | 12 fps@ 5MP |
| | Indoor / outdoor / in-vehicle | ■/ - /- | ■/ - /- | ■/ - /- |
| | Day / night | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 76dB | 76dB | 81dB |
| | ONVIF conformant | ■ | ■ | ■ |
| | Built-in microphone | ■ | ■ | ■ |
| | Power over Ethernet (PoE) | ■ | ■ | ■ |
| | | | | |
| Advanced features | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams |
| | Privacy masking | ■ | ■ | ■ |
| | Region Of Interest tracking | - | - | - |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | - | - | - |
| | Audio detection | ■ | ■ | ■ |
| Sensitivity | Minimum illumination day mode (color) | 0.24 lux | 0.24 lux | 0.35 lux |
| | Minimum illumination night mode (black/white) | 0.05 lux | 0.05 lux | 0.05 lux |
| | Night vision | - | - | - |
| | Max. range at night | - | - | - |
| Lens | Automatic Back Focus (ABF) | - | - | - |
| | Automatic varifocal | - | ■ | ■ |
| | Focal length | 3 - 10 mm | 3 - 10 mm | 3 - 10 mm |
| | Horizontal Angle of View (H AoV) | 36° - 117° | 36° - 117° | 27.8° - 86.6° |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 24-118/9-47/5-24/2-12 | 24-118/9-47/5-24/2-12 | 55-208/22-83/11-42/5-21 |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 1/1 | 1/1 | 1/1 |
| | Audio in / out | ■/■ | ■/■ | ■/■ |
| | Hybrid* / confrontation monitor | ■/■ | ■/■ | ■/■ |
| Housing | Weather rating | - | - | - |
| | Vandal resistant | - | - | - |
| | Operating temperature | -20° to 50° C (-4° to 122° F) | -20° to 50° C (-4° to 122° F) | -20° to 50° C (-4° to 122° F) |

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IP Video

Dome Cameras

► FLEXIDOME IP indoor 5000 IR



■ Available – Not available

| Commercial Type Number | | NII-51022-V3 | NII-50022-A3 | NII-50051-A3 |
|-----------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog starlight (extreme low-light sensitivity) | - / ■ | - / ■ | - / ■ |
| | 4K ultra HD | - | - | - |
| | | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - |
| | Intelligent Video Analytics | - | - | - |
| Basic features | Maximum resolution | HD 1080p | HD 1080p | 5MP |
| | Image sensor type | 1/2.7" | 1/2.7" | 1/3" |
| | Max. frames per second (fps) | 30 fps@ 1080p | 30 fps@ 1080p | 12 fps@ 5MP |
| | Indoor / outdoor / in-vehicle | ■ / - / - | ■ / - / - | ■ / - / - |
| | Day / night | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 76dB | 76dB | 81dB |
| | ONVIF conformant | ■ | ■ | ■ |
| | Built-in microphone | ■ | ■ | ■ |
| | Power over Ethernet (PoE) | ■ | ■ | ■ |
| | | | | |
| Advanced features | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams |
| | Privacy masking | ■ | ■ | ■ |
| | Region Of Interest tracking | - | - | - |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | - | - | - |
| | Audio detection | ■ | ■ | ■ |
| Sensitivity | Minimum illumination day mode (color) | 0.24 lux | 0.24 lux | 0.35 lux |
| | Minimum illumination night mode (black/white) | 0 lux (IR on) | 0 lux (IR on) | 0 lux (IR on) |
| | Night vision | ■ (infrared) | ■ (infrared) | ■ (infrared) |
| | Max. range at night | 15 m (50 ft) | 15 m (50 ft) | 15 m (50 ft) |
| Lens | Automatic Back Focus (ABF) | - | - | - |
| | Automatic varifocal | - | ■ | ■ |
| | Focal length | 3 - 10 mm | 3 - 10 mm | 3 - 10 mm |
| | Horizontal Angle of View (HAoV) | 36° - 117° | 36° - 117° | 27.8° - 86.6° |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 24-118/9-47/5-24/2-12 | 24-118/9-47/5-24/2-12 | 55-208/22-83/11-42/5-21 |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 1/1 | 1/1 | 1/1 |
| | Audio in / out | ■/■ | ■/■ | ■/■ |
| | Hybrid* / confrontation monitor | ■/■ | ■/■ | ■/■ |
| Housing | Weather rating | - | - | - |
| | Vandal resistant | - | - | - |
| | Operating temperature | -20° to 50° C (-4° to 122° F) | -20° to 50° C (-4° to 122° F) | -20° to 50° C (-4° to 122° F) |

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IP Video

Dome Cameras

►FLEXIDOME IP outdoor 5000 HD



►FLEXIDOME IP outdoor 5000 IR



►FLEXIDOME IP outdoor 5000 MP



►FLEXIDOME IP outdoor 5000 IR



■ Available – Not available

| Commercial Type Number | | NDN-50022-A3 | NDI-50022-A3 | NDN-50051-A3 | NDI-50051-A3 |
|-----------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | - / ■ | - / ■ | - / ■ | - / ■ |
| | starlight (extreme low-light sensitivity) | - | - | - | - |
| | 4K ultra HD | - | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - | - |
| | Intelligent Video Analytics | - | - | - | - |
| Basic features | Maximum resolution | HD 1080p | HD 1080p | 5MP | 5MP |
| | Image sensor type | 1/2.7" | 1/2.7" | 1/3" | 1/3" |
| | Max. frames per second (fps) | 30 fps@ 1080p | 30 fps@ 1080p | 12 fps@ 5MP | 12 fps@ 5MP |
| | Indoor / outdoor / in-vehicle | ■/■/- | ■/■/- | ■/■/- | ■/■/- |
| | Day / night | ■ | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 76dB | 76dB | 81dB | 81dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | - | - | - | - |
| | Power over Ethernet (PoE) | ■ | ■ | ■ | ■ |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | ■ | ■ |
| | Region Of Interest tracking | - | - | - | - |
| | Alarm triggering | ■/■ | ■/■ | ■/■ | ■/■ |
| Sensitivity | Built-in video analytics | - | - | - | - |
| | Audio detection | ■ | ■ | ■ | ■ |
| | Minimum illumination day mode (color) | 0.24 lux | 0.24 lux | 0.35 lux | 0.35 lux |
| Lens | Minimum illumination night mode (black/white) | 0.05 lux | 0 lux (IR on) | 0.05 lux | 0 lux (IR on) |
| | Night vision | - | ■ (infrared) | - | ■ (infrared) |
| | Max. range at night | - | 15 m (50 ft) | - | 15 m (50 ft) |
| | Automatic Back Focus (ABF) | - | - | - | - |
| 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° | 27.8° - 86.6° | 27.8° - 86.6° |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 24-118/9-47/5-24/2-12 | 24-118/9-47/5-24/2-12 | 55-208/22-83/11-42/5-21 | 55-208/22-83/11-42/5-21 |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 1/1 | 1/1 | 1/1 | 1/1 |
| | Audio in / out | ■/■ | ■/■ | ■/■ | ■/■ |
| | Hybrid* / confrontation monitor | ■/■ | -/■ | ■/■ | ■/■ |
| Housing | Weather rating | IP66 | IP66 | IP66 | IP66 |
| | Vandal resistant | IK10 | IK10 | IK10 | IK10 |
| | Operating temperature | -40° to 50° C (-22° to 122° F) | -40° to 50° C (-22° to 122° F) | -40° to 50° C (-22° to 122° F) | -40° to 50° C (-22° to 122° F) |

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IP Video

Dome Cameras

►FLEXIDOME IP starlight 6000 VR



►FLEXIDOME IP starlight 7000 VR



►FLEXIDOME IP starlight 6000 VR



►FLEXIDOME IP starlight 7000 VR



■ Available – Not available

| Commercial Type Number | | NIN-63013-Axxx | NIN-73013-Axxx | NIN-63023-Axxx | NIN-73023-Axxx |
|-----------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------|
| Bosch USPs | intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ |
| | intelligent Auto Exposure / Intelligent Defog | ■ | ■ | ■ | ■ |
| | starlight (extreme low-light sensitivity) | ■ | ■ | ■ | ■ |
| | 4K ultra HD | – | – | – | – |
| Video analytics at the edge | Essential Video Analytics | ■ | – | ■ | – |
| | Intelligent Video Analysis | – | ■ | – | ■ |
| Basic features | Maximum resolution | 720p | 720p | 1.3MP / 1080p | 1.3MP / 1080p |
| | Image sensor type | 1/2.8" | 1/2.8" | 1/2.8" | 1/2.8" |
| | Max. frames per second (fps) | 60fps @ 720p | 60fps @ 720p | 60fps @ 1.3MP / 1080p | 60fps @ 1.3MP / 1080p |
| | Indoor / outdoor / in-vehicle | ■/■/– | ■/■/– | ■/■/– | ■/■/– |
| | Day / night | ■ | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 120dB | 120dB | 120dB | 120dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | – | – | – | – |
| | Power over Ethernet (PoE) | ■ | ■ | ■ | ■ |
| | Compression (H.264 & MJPEG) / multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | ■ | ■ |
| | Region Of Interest tracking | ■ | ■ | ■ | ■ |
| | Upright video mode | ■ | ■ | ■ | ■ |
| | Alarm triggering | ■/■ | ■/■ | ■/■ | ■/■ |
| Sensitivity | Minimum illumination day mode (color) | 0.014 lx | 0.014 lx | 0.014 lx | 0.014 lx |
| | Minimum illumination night mode (black / white) | 0.0047 lx | 0.0047 lx | 0.0047 lx | 0.0047 lx |
| | Night vision | ■ (starlight) | ■ (starlight) | ■ (starlight) | ■ (starlight) |
| | Max. range at night | – | – | – | – |
| Lens | Automatic Back Focus (ABF) | ■ | ■ | ■ | ■ |
| | Automatic varifocal | ■ | ■ | ■ | ■ |
| | Focal length | 3 - 9 mm (A3xx) | 3 - 9 mm (A3xx) 10 - 23 mm (A10xx) | 3 - 9 mm (A3xx) | 3 - 9 mm (A3xx) 10 - 23 mm (A10xx) |
| | Horizontal Angle of View (HAoV) | 37° - 117° (A3xx) | 37° - 117° (A3xx) 14.4° - 32° (A10xx) | 37° - 117° (A3xx) | 37° - 117° (A3xx) 14.4° - 32° (A10xx) |
| DORI distances | Detect / Observe / Recognize / Identify (Distances in according to EN-50132-7 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* / confrontation 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) |

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

IP Video

Dome Cameras

►FLEXIDOME IP starlight 7000 RD

►FLEXIDOME IP 7000 RD

►FLEXIDOME IP dynamic 7000 RD



■ Available – Not available

| Commercial Type Number | | NDN-733Vxx-xx | NDN-832Vxx-xx | NDN-932Vxx-IP |
|-----------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | ■ (IVA models only)/■ | ■ (IVA models only)/■ | ■/■ |
| | starlight (extreme low-light sensitivity) | ■ | – | – |
| | 4K ultra HD | – | – | – |
| Video analytics at the edge | Essential Video Analytics | – | – | – |
| | Intelligent Video Analytics | ■ (depends on model/mode) | ■ (depends on model/mode) | ■ |
| Basic features | Maximum resolution | HD 720p/1.3 MP (4:3) | HD 1080p | HD 1080p |
| | Image sensor type | 1/3" | 1/2.7" | 1/3" |
| | Max. frames per second (fps) | 60 fps@ 720p | 30 fps@ 1080p | 30 fps@ 1080p |
| | Indoor / outdoor / in-vehicle | ■/■/– | ■/■/– | ■/■/– |
| | Day / night | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 84dB (IVA model with IAE + 16dB) | 76dB (IVA model with IAE + 16dB) | 90dB (with IAE + 16dB) |
| | ONVIF conformant | ■ | ■ | ■ |
| | Built-in microphone | – | – | – |
| | Power over Ethernet (PoE) | ■ | ■ | ■ |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | ■ |
| | Region Of Interest tracking | ■ | ■ | ■ |
| | Alarm triggering | ■/■ | ■/■ | ■/■ |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | ■ (depends on model) | ■ (depends on model) | ■ |
| | Audio detection | ■ | ■ | ■ |
| Sensitivity | Minimum illumination day mode (color) | 0.017 lux | 0.22 lux | 0.25 lux |
| | Minimum illumination night mode (black/white) | 0.0057 lux | 0.05 lux | 0.08 lux |
| | Night vision | ■ (starlight) | – | – |
| | Max. range at night | – | – | – |
| Lens | Automatic Back Focus (ABF) | ■ | ■ | ■ |
| | Automatic varifocal | – | – | – |
| | Focal length | 1.8 - 3 mm (V02-xx), 3.8 - 13 mm (V03-xx), 9 - 40 mm (V09-xx) | 1.8 - 3 mm (V02-xx), 3.8 - 13 mm (V03-xx), 9 - 40 mm (V09-xx) | 1.8 - 3 mm (V02-xx), 3.8 - 13 mm (V03-xx), 9 - 40 mm (V09-xx) |
| | Horizontal Angle of View (HAoV) | 77° - 105° (V02-xx), 21° - 72° (V03-xx), 7.1° - 30° (V09-xx) | 87° - 115° (V02-xx), 26° - 87° (V03-xx), 8.5° - 37° (V09-xx) | 70°-98° (V02-xx), 19°-63° (V03-xx), 6.2°-26° (V09-xx) |
| DORI distances | Detect / Observe / Recognize / Identify | 20-32/8-13/4-6/2-3 (V02-xx) | 16-40/6-16/3-8/2-4 (V02-xx) | 22-55/9-22/4-11/2-5 (V02-xx) |
| | (Distances according to EN-50132-7 standard) | 35-138/14-55/7-28/4-14 (V03-xx) | 27-166/11-66/5-33/3-17 (V03-xx) | 42-229/17-91/8-46/4-23 (V03-xx) |
| | | 96-413/38-164/19-83/10-41 (V09-xx) | 77-517/30-205/15-103/8-52 (V09-xx) | 111-709/44-281/22-142/11-71 (V09-xx) |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Best Face Detection JPEG posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 2/1 | 2/1 | 2/1 |
| | Audio in / out | ■ | ■ | ■ |
| | Hybrid* / confrontation 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) |

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

IP Video

Dome Cameras

►FLEXIDOME IP panoramic 5000 MP

►FLEXIDOME IP panoramic 5000 MP

►FLEXIDOME IP panoramic 7000 MP

►FLEXIDOME IP panoramic 7000 IC

reddot award 2015
winner

■ Available – Not available





| Commercial Type Number | | NUC-52051-F0 | NUC-52051-F0E | NIN-70122-Fx(A) | NFN-70122-Fx(A) |
|-----------------------------|-----------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | -/■ | -/■ | ■ (customized region)/■ | ■ (customized region)/■ |
| | intelligent Tracking | - | - | ■ | ■ |
| | starlight (extreme low-light sensitivity) | - | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - | - |
| | Intelligent Video Analytics | - | - | ■ (depends on model) | ■ |
| Basic features | Maximum resolution | 5MP | 5MP | 12MP | 12MP |
| | Image sensor type | 1/3" | 1/3" | 1/2.3" | 1/2.3" |
| | Max. frames per second (fps) | 15 fps | 15 fps | 30 fps | 30 fps |
| | Indoor / outdoor / in-vehicle | ■/-/- | ■/■/- | ■/-/- | ■/-/- |
| | Day / night | ■ (electronic) | ■ (electronic) | ■ | ■ |
| | Wide Dynamic Range (WDR) | 81dB | 81dB | 92dB (IVA model with IAE + 16dB) | 92dB (IVA model with IAE + 16dB) |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | ■ | - | ■ | - |
| | Power over Ethernet (PoE) | ■ | ■ | ■ | ■ |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Edge dewarping | - | - | ■ | ■ |
| | Privacy masking | ■ | ■ | ■ | ■ |
| | Region Of Interest tracking | - | - | ■ | ■ |
| | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ | ■/■ |
| Alarm triggering | Built-in video analytics | - | - | ■ (depends on model) | ■ (depends on model) |
| | Audio detection | ■ | - | ■ | ■ |
| | PTZ Intelligent Tracking | - | - | ■ | ■ |
| | 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) |
| Sensitivity | Minimum illumination night mode (black/white) | 0.12 lux | 0.12 lux | 0.15 lux (F1) 0.18 lux (F0) | 0.15 lux (F1) 0.18 lux (F0) |
| | Night vision | - | - | - | - |
| | Max. range at night | - | - | - | - |
| | Focal length | 1.19 mm | 1.19 mm | 1.6 mm (F1) 2.1 mm (F0) | 1.6 mm (F1) 2.1 mm (F0) |
| Lens | Horizontal Angle of View (H AoV) | 360° | 360° | 180° (F1) 360° (F0) | 180° (F1) 360° (F0) |
| | DORI distances | 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* / confrontation 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) |

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

IP Video

Fixed Cameras

■ Available – Not available

| | | ►TINYON IP 2000 | ►TINYON IP 2000 HD | ►TINYON IP 2000 WI | ►TINYON IP 2000 PIR |
|-----------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| | |  |  |  |  |
| Commercial Type Number | | NPC-20002-F2 | NPC-20012-F2(-W) | NPC-20012-F2WL(-W) | NPC-20012-F2L(-W) |
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | -/- | -/- | -/- | -/- |
| | starlight (extreme low-light sensitivity) | - | - | - | - |
| | 4K ultra HD | - | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - | - |
| | Intelligent Video Analytics | - | - | - | - |
| Basic features | Maximum resolution | VGA | HD 720p | HD 720p | HD 720p |
| | Image sensor type | 1/4" | 1/4" | 1/4" | 1/4" |
| | Max. frames per second (fps) | 30 fps@ 480p | 30 fps@ 720p | 30 fps@ 720p | 30 fps@ 720p |
| | Indoor / outdoor / in-vehicle | ■/-/- | ■/-/- | ■/-/- | ■/-/- |
| | Day / night | ■ (electronic) | ■ (electronic) | ■ (electronic) | ■ (electronic) |
| | Wide Dynamic Range (WDR) | 76dB | 76dB | 76dB | 76dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | - | ■ | ■ | ■ |
| | Power over Ethernet (PoE) | - | ■ | - | ■ |
| Advanced features | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| | Privacy masking | ■ | ■ | ■ | ■ |
| | Region Of Interest tracking | - | - | - | - |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | - | - | - | - |
| | Audio detection | - | ■ | ■ | ■ |
| | Passive infrared (PIR) motion detection | - | - | ■ | ■ |
| Sensitivity | Minimum illumination day mode (color) | 1 lux | 1 lux | 1 lux 0 lux (with wLED) | 1 lux 0 lux (with wLED) |
| | Minimum illumination night mode (black/white) | - | - | - | - |
| | Night vision | - | - | ■ (wLED) | ■ (wLED) |
| | Max. range at night | - | - | 4 m (13 ft) | 4 m (13 ft) |
| Lens | Automatic Back Focus (ABF) | - | - | - | - |
| | Automatic varifocal | - | - | - | - |
| | Focal length | 2.5 mm | 2.5 mm | 2.5 mm | 2.5 mm |
| | Horizontal Angle of View (HAoV) | 75° | 89° | 89° | 89° |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 16/7/3/2 | 26/10/5/3 | 26/10/5/3 | 26/10/5/3 |
| 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 | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | -/- | -/- | ■/■ | ■/■ |
| | Audio in / out | -/- | -/- (built-in loudspeaker) | -/- (built-in loudspeaker) | -/- (built-in loudspeaker) |
| | Hybrid* / confrontation monitor | -/- | -/- | -/- | -/- |
| | Wireless (WPS, IEEE 802, 11b/g/n) | - | - | ■ | - |
| Housing | Weather rating | - | - | - | - |
| | Vandal resistant | - | - | - | - |
| Operating temperature | | -10° to 45° C (14° to 113° F) | -10° to 50° C (14° to 122° F) | -10° to 40° C (14° to 104° F) | -10° to 45° C (14° to 113° F) |

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

IP Video

Fixed Cameras

►DINION IP 4000 HD



reddot award 2014
winner



►DINION IP 5000 HD



reddot award 2014
winner



►DINION IP 5000 MP



reddot award 2014
winner



►DINION IP bullet 4000 HD



►DINION IP bullet 5000 HD



■ Available – Not available

| Commercial Type Number | | NBN-40012-xxx | NBN-50022-xxx | NBN-50051-xxx | NTI-40012-A3(S)** | NTI-50022-A3(S)** |
|-----------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | -/■ | -/■ | -/- | -/■ | -/■ |
| | starlight (extreme low-light sensitivity) | - | - | - | - | - |
| | 4K ultra HD | - | - | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - | - | - |
| | Intelligent Video Analytics | - | - | - | - | - |
| Basic features | Maximum resolution | HD 720p/1.3 MP (4:3) | HD 1080p | 5MP | HD 720p | HD 1080p |
| | Image sensor type | 1/2.7" | 1/2.7" | 1/3" | 1/2.9" | 1/2.9" |
| | Max. frames per second (fps) | 30 fps@ 720p | 30 fps@ 1080p | 12 fps@ 5MP | 30 fps@ 720p | 30 fps@ 1080p |
| | Indoor / outdoor / in-vehicle | ■/■ (with housing)/- | ■/■ (with housing)/- | ■/■ (with housing)/- | ■/■/- | ■/■/- |
| | Day / night | ■ | ■ | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 76dB | 76dB | 81dB | 76dB | 76dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ | ■ |
| | Built-in microphone | ■ | ■ | ■ | - | - |
| | Power over Ethernet (PoE) | ■ | ■ | ■ | ■ | ■ |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | ■ | ■ | ■ |
| | Region Of Interest tracking | - | - | - | - | - |
| | Alarm triggering | ■/■ | ■/■ | ■/■ | ■/■ | ■/■ |
| Alarm triggering | Built-in video analytics | - | - | - | - | - |
| | Audio detection | ■ | ■ | ■ | ■ | ■ |
| | Minimum illumination day mode (color) | 0.25 lux | 0.25 lux | 0.35 lux | 0.07 lux | 0.07 lux |
| Sensitivity | Minimum illumination night mode (black/white) | 0.05 lux | 0.05 lux | 0.05 lux | 0 lux (IR on) | 0 lux (IR on) |
| | Night vision | - | - | - | ■ (infrared) | ■ (infrared) |
| | Max. range at night | - | - | - | 30 m (98 ft) | 30 m (98 ft) |
| Lens | Automatic Back Focus (ABF) | - | - | - | - | - |
| | Automatic varifocal | - | - | - | ■ | ■ |
| | Focal length | 3.3 - 12 mm (V3)/CS mount | 3.3 - 12 mm (V3)/CS mount | 3.3 - 12 mm (V3)/CS mount | 2.7 - 12 mm | 2.7 - 12 mm |
| | Horizontal Angle of View (HAoV) | 34° - 110° (V3) | 34° - 110° (V3) | 25° - 82° (V3) | 32° - 100° | 32° - 100° |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 18-84/7-33/4-17/2-8 (V3) | 27-125/11-50/5-25/3-13 (V3) | 60-234/24-93/12-47/6-23 (V3) | 21-89/8-35/4-17/2-9 | 21-89/8-35/4-17/2-9 |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| | Audio in / out | ■/■ | ■/■ | ■/■ | ■/■ | ■/■ |
| | Hybrid* / confrontation monitor | ■/■ | ■/■ | ■/■ | ■/■ | ■/■ |
| Housing | Weather rating | - | - | - | IP66 | IP66 |
| | Vandal resistant | - | - | - | IK08 | IK08 |
| | Operating temperature | -30° to 50° C (-22° to 122° F) | -30° to 50° C (-22° to 122° F) | -30° to 50° C (-22° to 122° F) | -30° to 60° C (-22° to 140° F) | -30° to 60° C (-22° to 140° F) |

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

** The NTI-40012-A3S model has a pre-mounted Surface Mount Box

IP Video

Dome Cameras

►DINION IP starlight 6000 HD



►DINION IP starlight 7000 HD



►DINION IP starlight 7000 HD



►DINION IP starlight 7000 HD



■ Available – Not available

| Commercial Type Number | | NBN-63013-B ** | NBN-73013-BA ** | NBN-63023-B ** | NBN-73023-BA ** |
|-----------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Bosch USPs | intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ |
| | intelligent Auto Exposure / Intelligent Defog | ■/■ | ■/■ | ■/■ | ■/■ |
| | starlight (extreme low-light sensitivity) | ■ | ■ | ■ | ■ |
| | 4K ultra HD | – | – | – | – |
| Video analytics at the edge | Essential Video Analytics | ■ | – | ■ | – |
| | Intelligent Video Analysis | – | ■ | – | ■ |
| Basic features | Maximum resolution | 720p | 720p | 1.3MP / 1080p | 1.3MP / 1080p |
| | Image sensor type | 1/2.8" | 1/2.8" | 1/2.8" | 1/2.8" |
| | Max. frames per second (fps) | 60fps @ 720p | 60fps @ 720p | 60fps @ 1.3MP / 1080p | 60fps @ 1.3MP / 1080p |
| | Indoor / outdoor / in-vehicle | ■/■(with housing)/– | ■/■(with housing)/– | ■/■(with housing)/– | ■/■(with housing)/– |
| | Day / night | ■ | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 120dB | 120dB | 120dB | 120dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | – | – | – | – |
| | Power over Ethernet (PoE) | ■ | ■ | ■ | ■ |
| Advanced features | Compression (H.264 & MJPEG) / multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| | Privacy masking | ■ | ■ | ■ | ■ |
| | Region Of Interest tracking | ■ | ■ | ■ | ■ |
| | Upright video mode | ■ | ■ | ■ | ■ |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | ■ | ■ | ■ | ■ |
| | Audio detection | ■ | ■ | ■ | ■ |
| Sensitivity | Minimum illumination day mode (color) | 0.014 lx | 0.014 lx | 0.014 lx | 0.014 lx |
| | Minimum illumination night mode (black / white) | 0.0047 lx | 0.0047 lx | 0.0047 lx | 0.0047 lx |
| | Night vision | ■ (starlight) | ■ (starlight) | ■ (starlight) | ■ (starlight) |
| | Max. range at night | – | – | – | – |
| Lens | Automatic Back Focus (ABF) | ■ | ■ | ■ | ■ |
| | Automatic varifocal | – | – | – | – |
| | Focal length | Lenses available separately C/CS mount 1.8 - 3 mm, 3.8 - 13 mm, 9 - 40 mm | Lenses available separately C/CS mount 1.8 - 3 mm, 3.8 - 13 mm, 9 - 40 mm | Lenses available separately C/CS mount 1.8 - 3 mm, 3.8 - 13 mm, 9 - 40 mm | Lenses available separately C/CS mount 1.8 - 3 mm, 3.8 - 13 mm, 9 - 40 mm |
| | Horizontal Angle of View (HAoV) | depending on optional lens | depending on optional lens | depending on optional lens | depending on optional lens |
| DORI distances | Detect / Observe / Recognize / Identify (Distances in according to EN-50132-7 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* / confrontation 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) |

* The hybrid functionality offers an easy migration path from legacy CCTV to a modern IP-based system, **Lens not included

IP Video

Fixed Cameras

► DINION IP starlight 8000 MP



► DINION IP ultra 8000 MP



GIT
SECURITY
AWARD
2015

■ Available – Not available

| Commercial Type Number | | NBN-80052-BA | NBN-80122-xxx |
|-----------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | ■/– | ■/– |
| | starlight (extreme low-light sensitivity) | ■ | – |
| | 4K ultra HD | – | ■ |
| Video analytics at the edge | Essential Video Analytics | – | – |
| | Intelligent Video Analytics | ■ | ■ |
| Basic features | Maximum resolution | 5 MP (16:9)/5.5 MP (4:3) | 12 MP (4:3)/UHD (16:9) |
| | Image sensor type | 1/1.8" | 1/2.3" |
| | Max. frames per second (fps) | 30 fps@ 5 MP | 20 fps@ 12MP, 30 fps@ UHD |
| | Indoor / outdoor / in-vehicle | ■/■ (with housing)/– | ■/■ (with housing)/– |
| | Day / night | ■ | ■ |
| | Wide Dynamic Range (WDR) | 97dB (5MP)/105dB (1080p) (with IAE + 16dB) | 92dB (with IAE + 16dB) |
| | ONVIF conformant | ■ | ■ |
| | Built-in microphone | – | – |
| | Power over Ethernet (PoE) | ■ | ■ |
| Advanced features | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams |
| | Privacy masking | ■ | ■ |
| | Region Of Interest tracking | ■ | ■ |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ |
| | Built-in video analytics | ■ | ■ |
| | Audio detection | ■ | ■ |
| Sensitivity | Minimum illumination day mode (color) | 0.0121 lux (5 MP) 0.00825 lux (1080p) | 0.36 lux (FxA) 0.11 lux (CA) |
| | Minimum illumination night mode (black/white) | 0.004 lux (5 MP) 0.00275 lux (1080p) | 0.12 lux (FxA) 0.037 lux (CA) |
| | Night vision | ■ (starlight) | – |
| | Max. range at night | – | – |
| | Automatic Back Focus (ABF) | ■ | – (FxA)/■(CA) |
| Lens | Automatic varifocal | – | – |
| | Focal length | C/CS mount | 3.2 mm (F2A) 5 mm (F6A) C/CS mount (CA) - 35/50/75 |
| | Horizontal Angle of View (HAoV) | Depending on optional lens | 71° (F6A) 120° (F2A) C/CS mount (CA) - 35/50/75 |
| | DORI distances | Depending on optional lens | 46/18/9/5 (F2A) 114/45/23/11 (F6A) Depending on optional lens (CA) |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Best Face Detection JPEG posting (IVA models only), Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 2/1 | 2/1 |
| | Audio in / out | ■/■ | ■/■ |
| | Hybrid* / confrontation monitor | ■/■ | –/– |
| Housing | Weather rating | – | – |
| | Vandal resistant | – | – |
| | Operating temperature | -20° to 50° C (-4° to 122° F) | -20° to 50° C (-4° to 122° F) |

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

IP Video

Specialty Cameras

►DINION IP capture 5000

►DINION IP imager 9000 HD

►FLEXIDOME IP corner 9000 MP



■ Available – Not available

| Commercial Type Number | | NER-L2Rx-1 | NAI-90022-AAA | NCN-90022-F1 |
|-----------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | – | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | –/– | ■/– | –/– |
| | starlight (extreme low-light sensitivity) | – | – | – |
| | 4K ultra HD | – | – | – |
| Video analytics at the edge | Essential Video Analytics | – | – | – |
| | Intelligent Video Analytics | – | ■ | – |
| Basic features | Maximum resolution | 576p | HD 1080p | 1080p |
| | Image sensor type | 1/3" | 1/2.7" | 1/2.7" |
| | Max. frames per second (fps) | 30 fps@ 576p | 30 fps@ 1080p | 30 fps@ 1080p |
| | Indoor / outdoor / in-vehicle | –/■/– | –/■/– | ■/–/– |
| | Day / night | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 120dB | 76dB (with IAE +16dB) | 76dB |
| | ONVIF conformant | ■ | ■ | ■ |
| | Built-in microphone | – | – | – |
| | Power over Ethernet (PoE) | ■ | ■ (HiPoE) | ■ |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | 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) | – | 0.4 lux | 0.3 lux |
| | Minimum illumination night mode (black/white) | 0 lux (IR on) | 0 lux (IR on) | 0 lux (IR on) |
| | Night vision | ■ (infrared) | ■ (infrared) | ■ (infrared) |
| | Max. range at night | 28 m (92 ft) | 120 m (394 ft) | 9 m (30 ft) |
| Lens | Automatic Back Focus (ABF) | – | ■ | – |
| | Automatic varifocal | – | ■ | – |
| | Focal length | 5 - 50 mm varifocal (calibrated to optimal capture distance) | 10 - 23 mm | 2 mm |
| | Horizontal Angle of View (HAoV) | 5.3° - 31.9° | 14.8° - 34° | 121° |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 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* / confrontation 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) |

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IP Video

Specialty Cameras

►EXTEGRA IP starlight 9000 FX

►EXTEGRA IP dynamic 9000 FX

►VOT thermal



■ Available – Not available

| Commercial Type Number | | NXF-9130-xx | NXF-9230-xx | VOT-320-Vxxx |
|-----------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | – |
| | Intelligent Auto Exposure / Intelligent Defog | –/■ | –/■ | –/– |
| | starlight (extreme low-light sensitivity) | ■ | – | – |
| | 4K ultra HD | – | – | – |
| Video analytics at the edge | Essential Video Analytics | – | – | – |
| | Intelligent Video Analytics | ■ | ■ | ■ |
| Basic features | Maximum resolution | HD 720p | HD 1080p | 320 x 240 |
| | Image sensor type | 1/3" | 1/2.8" | FPA - Vox |
| | Max. frames per second (fps) | 60 fps@ 720p | 30 fps@ 1080p | 8.3 fps@ 240p (-VxxL), 30 fps@ 240p (-VxxH) |
| | Indoor / outdoor / in-vehicle | –/■ (ex-proof/corrosive)/– | –/■ (ex-proof/corrosive)/– | ■/■/– |
| | Day / night | ■ | ■ | – |
| | Wide Dynamic Range (WDR) | 90dB | 90dB | – |
| | ONVIF conformant | ■ | ■ | ■ |
| | Built-in microphone | – | – | – |
| | Power over Ethernet (PoE) | ■ (HiPoE) | ■ (HiPoE) | – |
| | Compression (H.264 & MJPEG)/multi-streaming | ■ | ■ | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | – |
| | Region Of Interest tracking | – | – | – |
| | Alarm triggering | ■/■ | ■/■ | ■/■ |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | ■ | ■ | ■ |
| | Audio detection | ■ | ■ | ■ |
| Sensitivity | Minimum illumination day mode (color) | 0.052 lux | 0.066 lux | – |
| | Minimum illumination night mode (black/white) | 0.0103 lux | 0.033 lux | 0 lux |
| | Night vision | ■ (external EX65 IR) | ■ (external EX65 IR) | ■ (thermal) |
| | Max. range at night | – | – | 1450 m (4758 ft) |
| Lens | Automatic Back Focus (ABF) | ■ | ■ | – |
| | Automatic varifocal | ■ | ■ | – |
| | Focal length | 4.3 - 129 mm | 4.3 - 129 mm | 9 mm (-V9L, -V9H), 13 mm (-V13L, -V13H), 19 mm (-V19L, -V19H), 60 mm (-V60L, -V60H) |
| | Horizontal Angle of View (HAoV) | 2.1° to 59° | 2.3° to 65° | – |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 45-1397/18-554/9-279/5-140 | 68-2095/27-831/14-419/7-210 | Depending on optional lens |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) | ■ (up to 32 GB) |
| | Cloud application storage | Auto or Alarm JPEG Posting (FTP only) | Auto or Alarm JPEG Posting (FTP only) | Auto or Alarm JPEG Posting (FTP only) |
| Connections | Alarm input / output | 3/2 | 3/2 | 2/2 |
| | Audio in / out | 1/1 | 1/1 | –/– |
| | Hybrid* / confrontation monitor | –/– | –/– | –/– |
| Housing | Weather rating | IP67 | IP67 | IP66 |
| | Vandal resistant | – | – | – |
| | Operating temperature | -50° to 60° C (-58° to 140° F) (aluminum) -50° to 55° C (-58° to 131° F) (stainless steel) | -50° to 60° C (-58° to 140° F) (aluminum) -50° to 55° C (-58° to 131° F) (stainless steel) | -50° to 55° C (-58° to 131° F) |

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IP Video

Moving Cameras

►AUTODOME IP 4000 HD



►AUTODOME IP 4000 HD



■ Available – Not available

| Commercial Type Number | | NEZ-4112-XXXW4 | NEZ-4212-XXXW4 |
|-----------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | -/■ | -/■ |
| | Intelligent Tracking | - | - |
| | starlight (extreme low-light sensitivity) | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - |
| | Intelligent Video Analytics | - | - |
| Basic features | Maximum resolution | HD 720p | HD 1080p |
| | Image sensor type | 1/2.8" CMOS | 1/2.8" CMOS |
| | Max. frames per second (fps) | 30 fps@ 720p | 30 fps@ 1080p |
| | Indoor / outdoor / in-vehicle | ■/-/- | ■/-/- |
| | Day / night | ■ | ■ |
| | Wide Dynamic Range (WDR) | 76dB | 76dB |
| | ONVIF conformant | ■ | ■ |
| | Built-in microphone | - | - |
| | Power over Ethernet (PoE) | ■ (PoE+) | ■ (PoE+) |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ |
| | Nbr of presets/guard tours | 256/2 | 256/2 |
| | Wiper | - | - |
| | | | |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ |
| | Built-in video analytics | - | - |
| | Audio detection | ■ | ■ |
| | PTZ Intelligent Tracking | - | - |
| Sensitivity | Minimum illumination day mode (color) | 0.17 lux | 0.17 lux |
| | Minimum illumination night mode (black/white) | 0.039 lux | 0.039 lux |
| | Night vision | - | - |
| | Max. range at night | - | - |
| Lens | Focal length | 5.1 ~ 61.2 mm | 5.1 ~ 61.2 mm |
| | Horizontal Angle of View (HAoV) | 4.64° to 51.3° | 4.64° to 51.3° |
| | PTZ Zoom optical/digital | 12x/16x | 12x/16x |
| | Tilt angle | -90° to 0° | -90° to 0° |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 53-632/21-251/11-126/5-63 | 80-948/32-376/16-190/8-95 |
| Storage | Memory card slot | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 2/1 | 2/1 |
| | Audio in / out | ■/■ | ■/■ |
| | Hybrid* / confrontation monitor | -/- | -/- |
| Housing | Weather rating | IP65 (pendant)/IP51 (in-ceiling) | IP65 (pendant)/IP51 (in-ceiling) |
| | Vandal resistant | IK10 | IK10 |
| | Operating temperature | -10° to 60° C (-14° to 140° F) | -10° to 60° C (-14° to 140° F) |

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IP Video

Moving Cameras

►AUTODOME IP 5000 HD

►AUTODOME IP 5000 HD

►AUTODOME IP 5000 IR

►AUTODOME IP 5000 IR



■ Available – Not available

| Commercial Type Number | | NEZ 5130-XXXW4 | NEZ 5230-XXXW4 | NEZ 5130-IRCW4 | NEZ 5230-IRCW4 |
|-----------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | -/■ | -/■ | -/■ | -/■ |
| | Intelligent Tracking | - | - | - | - |
| | starlight (extreme low-light sensitivity) | - | - | - | - |
| Video analytics at the edge | Essential Video Analytics | - | - | - | - |
| | Intelligent Video Analytics | - | - | - | - |
| Basic features | Maximum resolution | HD 720p | HD 1080p | HD 720p | HD 1080p |
| | Image sensor type | 1/2.8" CMOS | 1/2.8" CMOS | 1/2.8" CMOS | 1/2.8" CMOS |
| | Max. frames per second (fps) | 30 fps@ 720p | 30 fps@ 1080p | 30 fps@ 720p | 30 fps@ 1080p |
| | Indoor / outdoor / in-vehicle | ■/■/- | ■/■/- | -/■/- | -/■/- |
| | Day / night | ■ | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 76dB | 76dB | 76dB | 76dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | - | - | - | - |
| | Power over Ethernet (PoE) | ■ (PoE+) | ■ (PoE+) | ■ (PoE+) | ■ (PoE+) |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | ■ | ■ |
| | Nbr of presets/guard tours | 256/2 | 256/2 | 256/2 | 256/2 |
| | Wiper | - | - | - | - |
| | Alarm triggering | ■/■ | ■/■ | ■/■ | ■/■ |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | - | - | - | - |
| | Audio detection | ■ | ■ | ■ | ■ |
| | PTZ Intelligent Tracking | - | - | - | - |
| Sensitivity | Minimum illumination day mode (color) | 0.22 lux | 0.22 lux | 0.11 lux | 0.11 lux |
| | Minimum illumination night mode (black/white) | 0.044 lux | 0.044 lux | 0 lux (IR on) | 0 lux (IR on) |
| | Night vision | - | - | ■ (infrared) | ■ (infrared) |
| | Max. range at night | - | - | 180 m (590 ft) | 180 m (590 ft) |
| Lens | Focal length | 4.3 ~ 129 mm | 4.3 ~ 129 mm | 4.3 ~ 129 mm | 4.3 ~ 129 mm |
| | Horizontal Angle of View (HAoV) | 2.3° to 65° | 2.3° to 65° | 2.3° to 65° | 2.3° to 65° |
| | PTZ Zoom optical/digital | 30x/16x | 30x/16x | 30x/16x | 30x/16x |
| | Tilt angle | -90° to 0° | -90° to 0° | -90° to 0° | -90° to 0° |
| DORI distances | Detect / Observe / Recognize / Identify (Distances according to EN-50132-7 standard) | 40-1275/16-506/8-255/4-128 | 60-1913/24-759/12-383/6-191 | 40-1275/16-506/8-255/4-128 | 60-1913/24-759/12-383/6-191 |
| 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* / confrontation monitor | -/- | -/- | -/- | -/- |
| Housing | Weather rating | IP66 (pendant)/IP51 (in-ceiling) | IP66 (pendant)/IP51 (in-ceiling) | IP66 | IP66 |
| | Vandal resistant | IK10 | IK10 | - | - |
| | Operating temperature | -40° to 60° C (-40° to 140° F) | -40° to 60° C (-40° to 140° F) | -40° to 60° C (-40° to 140° F) | -40° to 60° C (-40° to 140° F) |

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IP Video

Moving Cameras

►AUTODOME IP 7000



►AUTODOME IP 7000 HD



►AUTODOME IP starlight 7000 HD



►AUTODOME IP starlight 7000 HD



■ Available – Not available

| Commercial Type Number | | VG5-7028/7036 | VG5-7220 | VG5-7130 | VG5-7230 |
|-----------------------------|-----------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | – | – | ■ | ■ |
| | Intelligent Auto Exposure / Intelligent Defog | –/– | –/– | –/■ | –/■ |
| | Intelligent Tracking | ■ | ■ | ■ | ■ |
| | starlight (extreme low-light sensitivity) | – | – | ■ | ■ |
| Video analytics at the edge | Essential Video Analytics | – | – | – | – |
| | Intelligent Video Analytics | ■ | ■ | ■ | ■ |
| Basic features | Maximum resolution | 4CIF | HD 1080p | HD 720p | HD 1080p |
| | Image sensor type | 1/4" CCD | 1/2.8" | 1/3" CMOS | 1/2.8" |
| | Max. frames per second (fps) | 30 fps@ 576p | 60 fps@ 720p 30 fps@ 1080p | 60 fps@ 720p | 60 fps@ 720p 30 fps@ 1080p |
| | Indoor / outdoor / in-vehicle | ■/■/– | ■/■/– | ■/■/– | ■/■/– |
| | Day / night | ■ | ■ | ■ | ■ |
| | Wide Dynamic Range (WDR) | 92dB | 86dB | 90dB | 120dB |
| | ONVIF conformant | ■ | ■ | ■ | ■ |
| | Built-in microphone | – | – | – | – |
| | Power over Ethernet (PoE) | ■ (HiPoE) | ■ (HiPoE) | ■ (HiPoE) | ■ (HiPoE) |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams | ■/4 streams |
| Advanced features | Privacy masking | ■ | ■ | ■ | ■ |
| | Nbr of presets/guard tours | 256/2 | 256/2 | 256/2 | 256/2 |
| | Wiper | – | – | – | – |
| | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ | ■/■ |
| Alarm triggering | Built-in video analytics | ■ | ■ | ■ | ■ |
| | Audio detection | ■ | ■ | ■ | ■ |
| | PTZ Intelligent Tracking | ■ | ■ | ■ | ■ |
| | PTZ Intelligent Tracking | ■ | ■ | ■ | ■ |
| Sensitivity | Minimum illumination day mode (color) | 0.66 lux (36x) 0.33 lux (28x) | 0.06 lux | 0.052 lux | 0.006 lux |
| | Minimum illumination night mode (black/white) | 0.104 lux (36x) 0.066 lux (28x) | 0.033 lux | 0.0103 lux | 0.0009 lux |
| | Night vision | – | – | ■ (starlight) | ■ (starlight) |
| | Max. range at night | – | – | – | – |
| Lens | Focal length | 3.4 - 122.4 mm (x36) 3.5 - 98 mm (x28) | 4.9 - 94 mm | 4.3 - 129 mm | 4.3 - 129 mm |
| | Horizontal Angle of View (HAoV) | 28x : 2.13 to 54.98 36x : 1.7 to 56.35 | 3.3 to 59.5 | 2.3° to 59° | 2.3° to 63.7° |
| | PTZ Zoom optical/digital | 36x or 28x/12x | 20x/12x | 30x/12x | 30x/12x |
| | Tilt angle | -90° to 14° (pendant) | -90° to 14° (pendant) | -90° to 14° (pendant) | -90° to 14° (pendant) |
| | DORI distances | 27-757/11-301/5-151/3-76 (28x) 26-949/10-377/5-190/3-95 (36x) | 75-1517/30-602/15-303/8-152 | 45-1275/18-506/9-255/5-128 | 62-1913/25-759/12-383/6-191 |
| Storage | Memory card slot | ■ (up to 32 GB/2 TB) | ■ (up to 32 GB/2 TB) | ■ (up to 2 TB) | ■ (up to 2 TB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 7/4 | 7/4 | 7/4 | 7/4 |
| | Audio in / out | ■/■ | ■/■ | ■/■ | ■/■ |
| | Hybrid* / confrontation monitor | –/– | –/– | –/– | –/– |
| Housing | Weather rating | IP66 (outdoor) | IP66 (outdoor) | IP66 (outdoor) | IP66 (outdoor) |
| | Vandal resistant | IK08 (with rugged bubble) | IK10 (with rugged bubble) | – | – |
| | Operating temperature | -40° to 55° C (-40° F to 131° F) | -40° to 55° C (-40° F to 131° F) | -40° to 55° C (-40° F to 131° F) | -40° to 55° C (-40° F to 131° F) |

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IP Video

Moving Cameras

►MIC IP starlight 7000 HD



►MIC IP starlight 7000 HD



►MIC 612



■ Available – Not available

| Commercial Type Number | | MIC-7130-Px4xx | MIC-7230-x5 | MIC612 ** |
|-----------------------------|-----------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------|
| Bosch USPs | Intelligent Dynamic Noise Reduction | ■ | ■ | – |
| | Intelligent Auto Exposure / Intelligent Defog | –/■ | –/■ | –/– |
| | Intelligent Tracking | ■ | ■ | – |
| | starlight (extreme low-light sensitivity) | ■ | ■ | – |
| Video analytics at the edge | Essential Video Analytics | – | – | – |
| | Intelligent Video Analytics | ■ | ■ | ■ |
| Basic features | Maximum resolution | HD 720p | HD 1080p | 550 TVL (optical) 320/640 (thermal) |
| | Image sensor type | 1/3" | 1/2.8" | 1/4" CCD/FPA |
| | Max. frames per second (fps) | 60 fps@ 720p | 60 fps@ 720p 30 fps@1080p | 30 fps@ 576p |
| | Indoor / outdoor / in-vehicle | –/■/– | –/■/– | –/■/– |
| | Day / night | ■ | ■ | ■ (optical) |
| | Wide Dynamic Range (WDR) | 90dB | 120dB@ 30fps 90dB@ 60fps | – |
| | ONVIF conformant | ■ | ■ | ■ |
| | Power over Ethernet (PoE) | ■ (HiPoE) | ■ (HiPoE) | – |
| | Compression (H.264 & MJPEG)/multi-streaming | ■/4 streams | ■/4 streams | ■/4 streams |
| | Privacy masking | ■ | ■ | ■ |
| Advanced features | Nbr of presets/guard tours | 256/2 | 256/2 | 99/2 |
| | Wiper | ■ | ■ | ■ |
| Alarm triggering | Tamper detection / Video motion detection | ■/■ | ■/■ | ■/■ |
| | Built-in video analytics | ■ | ■ | ■ |
| | Audio detection | ■ (with VJC-7000-90) | ■ (with VJC-7000-90) | – |
| | PTZ Intelligent Tracking | ■ | ■ | – |
| Sensitivity | Minimum illumination day mode (color) | 0.052 lux | 0.006 lux | 0.66 lux (optical) N.A. (thermal) |
| | Minimum illumination night mode (black/white) | 0.0103 lux | 0.0009 lux | 0.104 lux (optical) 0 lux (thermal) |
| | Night vision | ■ (optional illuminator) | ■ (optional illuminator) | ■ (thermal) |
| | Max. range at night | 175 m (575 ft) | 300 m (971 ft) | 1500 m (4922 ft) |
| Lens | Focal length | 4.3 - 129 mm | 4.3 - 129 mm | 3.4 - 122.4 mm (optical), 35 mm (thermal T models) 50 mm (thermal H models) |
| | Horizontal Angle of View (HAoV) | 2.1° to 58.3° | 2.3° to 63.7° | 1.7° to 57.8° |
| | PTZ Zoom optical/digital | 30x/12x | 30x/12x | 36x/12x |
| | Tilt angle | -58° to 90° (upright), -90° to 90° (canted) | -58° to 90° (upright), -90° to 90° (canted) | -58° to 90° |
| | DORI distances | 45-1396/18-554/9-279/4-139 | 62-1913/25-759/12-383/6-191 | 26-949/10-377/5-190/3-95 (optical) |
| Storage | Memory card slot | ■ (up to 32 GB) (with VJC-7000-90) | ■ (up to 32 GB) (with VJC-7000-90) | ■ (up to 32 GB) |
| | Cloud application storage | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting | Auto or Alarm JPEG Posting, Video Clips or JPEG Exporting |
| Connections | Alarm input / output | 5/3 (with MIC-ALM-WAS-24) | 5/3 (with MIC-ALM-WAS-24) | 8/2 (optional card) |
| | Audio in / out | ■/■ (with VJC-7000-90) | ■/■ (with VJC-7000-90) | ■/■ |
| | Hybrid* / confrontation monitor | ■ (with external decoder)/– | ■ (with external decoder)/– | ■/– |
| Housing | Weather rating | IP68 | IP68 | IP68 |
| | Vandal resistant | IK10 | IK10 | IK10 |
| | Operating temperature | -40° to 60° C (-40° to 140° F) | -40° to 60° C (-40° to 140° F) | -40° to 60° C (-40° F to 140° F) |

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

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

IP Video

Digital Recording

All-in-one solution

►DIVAR IP 3000

►DIVAR IP 7000 2U

►DIVAR IP 7000 3U



■ Available – Not available

| Commercial Type Number | | DIP-304x-xxx | DIP-718x-xxx | DIP-71Fx-xxx |
|------------------------|---------------------------------------|-------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| Basic functions | Max. system size | 32 | 128 | 128 |
| | Integrated video management | ■ | ■ | ■ |
| | RAID Level | — | RAID-5, RAID-6 | RAID-5, RAID-6 |
| | Supported resolutions | CIF/2CIF/4CIF/720p/1080p/5MP | CIF/2CIF/4CIF/720p/1080p/5MP/UHD | CIF/2CIF/4CIF/720p/1080p/5MP/UHD |
| | Video compression | H.264, MPEG-4, ONVIF, RTSP, JPEG | H.264, MPEG-4, ONVIF, RTSP, JPEG | H.264, MPEG-4, ONVIF, RTSP, JPEG |
| | Transcoding | ■ | ■ | ■ |
| | ONVIF | ■ | ■ | ■ |
| Mechanical | Form factor | 4-bay Mini-Tower | 2U 19-inch Rack Mount | 3U 19-inch Rack Mount |
| | Network connections (LAN) | 1x Gigabit Ethernet | 2x Gigabit Ethernet, 1x 100Mbit (Mgmt) | 2x Gigabit Ethernet, 1x 100Mbit (Mgmt) |
| | USB ports | 4x USB 2.0/1x USB 3.0 | 4x USB 2.0, 2x USB 3.0 | 4x USB 2.0, 2x USB 3.0 |
| | Number of power supplies | 1 | 2 | 2 |
| | Power supplies hot swappable | — | ■ | ■ |
| Video output | Connector type | 1 DVI, 1 VGA | 4x mini-DP (one mini-DP to VGA adapter included) | 4x mini-DP (one mini-DP to VGA adapter included) |
| | Spotmonitor | 1 per IP decoder, 2nd video output (VGA) | 3x via local mini-DP, 1 per IP decoder | 3x via local mini-DP, 1 per IP decoder |
| Audio | In/out channels | 32 (audio playback via remote station only) | 128 | 128 |
| | Compression type | G.726 | G.726 | G.726 |
| | Synchronous audio | ■ | ■ | ■ |
| | Associate multiple cameras to 1 Audio | ■ | ■ | ■ |
| Recording | Video Recording Manager (VRM) | ■ | ■ | ■ |
| | Schedule recording modes | ■ | ■ | ■ |
| Storage options | Max. drives supported | 4 | 8 | 16 |
| | Available capacities per drive | 2 TB | 3 or 4 TB | 3 or 4 TB |
| | Base system capacity TB | 0, 4 or 8 TB | 0, 12, 16, 24 or 32 TB | 0, 48 or 64 TB |
| | Max. Base system capacity TB | 8 TB | 32 TB | 64 TB |
| | Full system capacity TB | 24 TB | 288 TB | 320 TB |
| | Extensible/external support | iSCSI | iSCSI | iSCSI |
| Storage extensions | Max. number of units | 2x DIVAR IP 2000 or DIVAR IP 5000 | 4x DIVAR IP 6000 | 4x DIVAR IP 6000 |
| | Maximum drives supported | 4 | 4, 6 or 8 | 16 |
| | Available capacities per drive | 2 TB | 3 or 4 TB | 3 or 4 TB |
| | Hot swappable | — | ■ | ■ |
| Export/back-up of data | Data format | native, MOV, ASF | native, MOV, ASF | native, MOV, ASF |
| | Built-in DVD writer | — | ■ | ■ |
| | Supported devices | External CD/DVD Writer, USB 2.0, USB 3.0, iSCSI | USB 2.0, USB 3.0, iSCSI, internal CD/DVD Writer | USB 2.0, USB 3.0, iSCSI, internal CD/DVD Writer |
| | Back-up mode | Manual or Automatic | Manual or Automatic | Manual or Automatic |

Table continued on the next page

IP Video

Digital Recording

All-in-one solution

►DIVAR IP 3000

►DIVAR IP 7000 2U

►DIVAR IP 7000 3U



■ Available – Not available

| Commercial Type Number | | DIP-304x-xxx | DIP-718x-xxx | DIP-71Fx-xxx |
|-----------------------------|------------------------------------|----------------------|----------------------|----------------------|
| Redundancy | Power supply redundancy | — | ■ | ■ |
| | Hot swappable HDD | — | ■ | ■ |
| Software options | PTZ control | ■ | ■ | ■ |
| | CCTV keyboard support | ■ | ■ | ■ |
| | Admin control | ■ | ■ | ■ |
| | Export options | ■ | ■ | ■ |
| | 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 | — | 4 | 4 |
| | Forensic search support (metadata) | ■ | ■ | ■ |
| Advanced features support | Webclient | ■ | ■ | ■ |
| | Bosch Video Client | ■ (v1.5 or newer) | ■ (v1.5 or newer) | ■ (v1.5 or newer) |
| Supported software | Bosch Video Management System | ■ (v4.50 or newer) | ■ (v6.0 or newer) | ■ (v6.0 or newer) |
| | 3rd Party software | — | — | — |
| 3rd party integration tools | Optional ATM/POS integration | ■ | ■ | ■ |
| | SDK (IPP) | ■ | ■ | ■ |

** Not all models are available in all regions, please check with your local sales representative

IP Video

Digital Storage

Network Video Recorder

►DIVAR IP 5000

►DIVAR IP 6000 2U

►DIVAR IP 6000 3U

►DSA E-Series



■ Available – Not available

| Commercial Type Number | | DIP-504xxx-xxx | DIP-618x-xxx | DIP-61Fx-xxx | DSA-Nxxxxx-xxxx |
|------------------------|---------------------------------------|---------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------------------------------|
| Basic functions | Max. system size | 32 | 128 | 128 | 600 |
| | Integrated video management | — | — | — | — |
| | RAID Level | RAID-1 | RAID-5, RAID 6 | RAID-5 | RAID-5/RAID-6 |
| | Supported resolutions | CIF/2CIF/4CIF/720p/1080p/5MP | CIF/2CIF/4CIF/720p/1080p/5MP/UHD | CIF/2CIF/4CIF/720p/1080p/5MP/UHD | CIF/2CIF/4CIF/720p/1080p/5MP |
| | Video compression | H.264, MPEG-4, ONVIF, RTSP, JPEG | H.264, MPEG-4, ONVIF, RTSP, JPEG | H.264, MPEG-4, ONVIF, RTSP, JPEG | H.264, MPEG-4, ONVIF, RTSP, JPEG |
| | Transcoding | ■ | ■ | ■ | — |
| | ONVIF | ■ | ■ | ■ | ■ |
| Mechanical | Form factor | 4-bay Mini-Tower | 2U 19-inch Rack Mount | 3U 19-inch Rack Mount | 2U 19-inch Rack Mount |
| | Network connections (LAN) | 2x Gigabit Ethernet | 2x Gigabit Ethernet, 1x 100Mbit (Mgmt) | 2x Gigabit Ethernet, 1x 100Mbit (Mgmt) | 2x Gigabit Ethernet/ 2x 10 Gigabit Ethernet |
| | USB ports | 4x USB 3.0 | 4x USB 2.0, 2x USB 3.0 | 4x USB 2.0, 2x USB 3.0 | — |
| | Number of power supplies | 1 | 2 | 2 | 2 |
| | Power supplies hot swappable | — | ■ | ■ | ■ |
| Video output | Connector type | — | VGA | VGA | — |
| | Spotmonitor | — | 1 per IP decoder | 1 per IP decoder | — |
| Audio | In/out channels | 32 (audio playback via remote station only) | 128 (audio playback via remote station only) | 128 (audio playback via remote station only) | 800 (audio playback via remote station only) |
| | Compression type | G.726 | G.726 | G.726 | G.726 |
| | Synchronous audio | ■ | ■ | ■ | ■ |
| | Associate multiple cameras to 1 Audio | ■ | ■ | ■ | ■ |
| Recording | Video Recording Manager (VRM) | ■ | ■ (VRM ready) | ■ (VRM ready) | — |
| | Schedule recording modes | ■ | ■ | ■ | ■ |
| Storage options | Max. drives supported | 4 | 8 | 16 | 12 |
| | Available capacities per drive | 2 or 4 TB | 3 or 4 TB | 3 or 4 TB | 2, 3, 4 or 6 TB |
| | Base system capacity TB | 0, 4, 8 or 16 TB | 0, 12, 16, 24 or 32 TB | 0, 48 or 64 TB | — |
| | Max. Base system capacity TB | 16 TB | 32 TB | 64 TB | 24/36/48/72 TB |
| | Full system capacity TB | 16 TB | 224 TB | 256 TB | 384/768/1162 TB ** |
| | Extenable/external support | iSCSI | iSCSI | iSCSI | 6Gb/s SAS (Copper) |
| Storage extensions | Max. number of units | — | 4x DIVAR IP 6000 2U or 3x DIVAR IP 6000 3u | 4x DIVAR IP 6000 2U or 3x DIVAR IP 6000 3u | 7/3 ** |
| | Maximum drives supported | — | 4, 6 or 8 | 16 | 12/60 ** |
| | Available capacities per drive | — | 3 or 4 TB | 3 or 4 TB | 2, 3, 4 or 6 TB ** |
| | Hot swappable | — | ■ | ■ | ■ |
| Export/back-up of data | Data format | MP4 | WMF, Bosch ASF | WMF, Bosch ASF | WMF, Bosch ASF |
| | Built-in DVD writer | — | ■ | ■ | — |
| | Supported devices | Web download, FTP, Dropbox | USB 2.0, USB 3.0, iSCSI | USB 2.0, USB 3.0, iSCSI | External CD/DVD Writer, USB 2.0, iSCSI |
| | Back-up mode | manual | manual | manual | manual or automatic |
| Redundancy | Power suply redundancy | — | ■ | ■ | ■ |
| | Hot swappable HDD | — | ■ | ■ | ■ |

Table continued on the next page

IP Video

Digital Storage

Network Video Recorder

►DIVAR IP 5000

►DIVAR IP 6000 2U

►DIVAR IP 6000 3U

►DSA E-Series



■ Available – Not available

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

○ * Via Bosch video software

** Up to three high-density shelf expansion units (60 x 6 TB HDD per expansion shelf) to one Dual controller base unit may be connected - CTN:DSA-N2C7X6-12AT

IP Video

Video Software

►Video Management System



■ Available – Not available

| Commercial Type Number | | BVMS (v6.0) Lite | BVMS (v6.0) Pro |
|------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| | Channel Count | 32 to 64 | 8 to 200,000 |
| | System Architecture Support | Standalone to Client Server | Client Server (one server/2000 cameras) Multi Server (up to 30 servers/10,000 cameras) Multi-System (unlimited servers/cameras) |
| | Full VMS | Full VMS | Full VMS |
| | Software based Video IP Platform | ■ | ■ |
| | ONVIF for 3rd Party Camera Intergration | ■ | ■ |
| | Multi-site Support (independent systems tied together) | ■ | ■ |
| | Multi-site Support (dispersed system recording, cameras, remote independent client) | ■ | ■ |
| | Mobile Clients | ■ MVS license required: 1 license provides up to 20 connections. Multiple servers with MVS | ■ MVS license required: 1 license provides up to 20 connections. Multiple servers with MVS per site |
| | Workstations/Clients | 2 clients for 32, 4 clients for 64 | 100 (Client-Server and Multi-Server), Unlimited (Multi-System) |
| | LDAP | ■ | ■ |
| Resolution | COTS (Commercial off the Shelf) for Server/Workstation | ■ | ■ |
| | HD-ready | ■ | ■ |
| | SD and HD | ■ | ■ |
| | SD and HD Decoder support | ■ | ■ |
| | Monitor Wall Client GUI Support | ■ | ■ |
| Encoding | 4K ultra HD support | ■ | ■ |
| | H.264 | ■ | ■ |
| | MPEG-4 | ■ (via BRS only) | ■ (via BRS only) |
| | 3rd party camera support | ■ ONVIF 1.02/Profile-S/RTSP and MJPEG | ■ ONVIF 1.02/Profile-S/RTSP and MJPEG |
| Display | Multi-monitor support | ■ (4) | ■ (4) |
| | Workstation OS support | Win7, SP1, Win8.1 | Win7, SP1, Win8.1 |
| | 16:9 Monitor support | ■ | ■ |
| | Mapping | ■ | ■ |
| | Dynamic cameo scaling | — | — |
| | Client dewarping | ■ | ■ |

Table continued on the next page

IP Video

Video Software

►Video Management System



■ Available – Not available

| Commercial Type Number | | BVMS (v6.0) Lite | BVMS (v6.0) Pro |
|------------------------|--------------------------------------------|----------------------|----------------------|
| Alarm Management | User management | ■ | ■ |
| | Digital I/O alarms | ■ | ■ |
| | System event alarms | ■ | ■ |
| | Motion alarms | ■ | ■ |
| | Event response and command scripts | ■ | ■ |
| | IVA alarms | ■ | ■ |
| | IVA forensic search | ■ | ■ |
| | Audio | ■ | ■ |
| | Compound events | ■ | ■ |
| | Scheduled dependent alarming | ■ | ■ |
| | Event allocation to user groups | ■ | ■ |
| Control | AUTODOME Intelligent Tracking | ■ | ■ |
| | PTZ | ■ | ■ |
| | IntuiKey | ■ | ■ |
| | Virtual matrix | ■ | ■ |
| Storage | @edge camera support | ■ | ■ |
| | iSCSI | ■ | ■ |
| | NVR support | ■ (BRS) | ■ (BRS) |
| | VRM | ■ | ■ |
| | IVA metadata | ■ | ■ |
| | Support redundant storage | — | ■ |
| | DLA Support (Maximum count of VRM servers) | ■ (5) | ■ (125) |
| Integration | BVMS | — | — |
| | BRS | ■ | ■ |
| | DxR 400/600/700 | ■ | ■ |
| | BVC | — | — |
| | Bosch intrusion panel | ■ (GV4 and B-series) | ■ (GV4 and B-series) |
| | Access | — | — |
| | OPC | ■ | ■ |
| | CLI/CCL | ■ | ■ |
| | ATM/POS | ■ | ■ |
| | BIS | ■ | ■ |
| | Script control for all system functions | ■ | ■ |
| | SDK integration into 3rd party SW | ■ | ■ |
| | Virtual inputs | ■ | ■ |
| | Barco Transform N series | ■ | ■ |
| Networking | LAN/intranet | ■ | ■ |
| | WAN | ■ | ■ |
| | Remote/Decoupled Client | ■ | ■ |
| | Mobile Viewing APP | ■ (iOS only) | ■ (iOS only) |
| | Web Client | ■ | ■ |

IP Video

Viewing Software

►Video Security App

►Video security client

►Advanced Viewing Client



■ Available – Not available

| Commercial Type Number | | | | |
|----------------------------|-------------------------------------------------------------------------------------|---------------------------|---------------------------|------------------------------------|
| | No. of channels | 16 | Up to 16 | 32 per site |
| | Usage situation | Mobile usage | Stationary and hybrid | Standalone |
| | Workstation OS support | iOS, Android | Win7, Win8 | XP, Vista, Win7, SP1 |
| | Software based Video IP Platform | ■ | ■ | ■ |
| | Multi-site Support (independent systems tied together) | — | — | — |
| | Multi-site Support (dispersed system recording, cameras, remote independent client) | — | — | — |
| Key technologies supported | Dynamic Transcoding | ■ | ■ | ■ |
| | IVA | ■ | ■ | ■ |
| | Client side dewarping (panoramic) | — (planned mid 2015) | ■ | ■ |
| | 4K ultra HD | — | ■ | ■ |
| Encoding | starlight | — | — | — |
| | H.264 | ■ | ■ | ■ |
| | MPEG-4 | ■ | ■ | ■ |
| Viewing | 3rd party camera support | ■ (with VSG) | ■ (with VSG) | ONVIF 1.02/Profile-S with DIVAR IP |
| | Multi-monitor support | — | — | ■ (2) |
| | Workstation OS support | iOS | Win7, Win8 | XP, Vista, Win7, SP1 |
| | 16:9 monitor support | n/a | ■ | ■ |
| | Viewing frequency | — | — | — |
| Alarm Management | Dynamic cameo scaling | ■ | ■ | ■ |
| | User management | — | — | — |
| | Digital I/O alarms | — | — | ■ |
| | System event alarms | — | — | ■ |
| | Motion alarms | — | — | ■ |
| | Event response and command scripts | — | — | — |
| | IVA alarms | — | — | ■ |
| | IVA forensic search | ■ (limited functionality) | ■ (limited functionality) | ■ |
| | Audio | — | — | ■ |
| | Compound events | — | — | — |
| | Scheduled dependent alarming | — | — | — |
| | Event allocation to user groups | — | — | — |
| Control | AUTODOME Intelligent Tracking | ■ | ■ | ■ |
| | PTZ | ■ | ■ | ■ |
| | IntuiKey | — | — | ■ (limited functionality) |
| | Virtual matrix | — | — | — |
| Storage | @edge camera support | ■ | ■ | ■ |
| | iSCSI | ■ | ■ | ■ |
| | NVR support | — | — | — |
| | VRM | ■ | ■ | ■ (via DIVAR IP) |
| | IVA metadata | ■ | ■ | ■ |
| | Support redundant storage | — | — | — |
| | DLA Support (VRM Mode) | ■ | ■ | ■ (1) |
| Integration | BRS | — | — | — |
| | DxR 400/600/700 | — | — | ■ |
| | Virtual inputs | — | — | ■ |

IP Video

Encoders and Decoders

| Encoders | | | | | Decoders | |
|-------------|-----------|--------------------|--------------------|----------------------|------------------------|------------------------|
| ►VIP X1XF E | ►VIP X1XF | ►VIDEOJET X20 XF E | ►VIDEOJET X40 XF E | ►VIDEOJET multi 4000 | ►VIDEOJET decoder 3000 | ►VIDEOJET decoder 8000 |



■ Available – Not available

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

►Modular Systems



■ Available – Not available

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



■ Available – Not available

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

IP Video
Transcoders

| | |
|------------------|---------------------------------------------|
| Transcoders | Transcoder/network & alarm interface device |
| ►VIDEOJET XTC XF | ►VIDEOJET connect 7000 |



■ Available – Not available

| Commercial Type Number | | VJT-XTCXF | VJC-7000-90 |
|------------------------|------------------------------------------------|----------------------------------|-------------------------------------------------------------|
| | Description | 4 Channel/Dual-stream Transcoder | 5 Channel network switch/Single-stream Transcoder |
| Video/Audio | Camera Inputs | 4 | 4 |
| | Video Codec | H.264 High Profile | H.264 High Profile |
| | Max. frames per second (fps) | 25/30@4CIF | 25/30@4CIF |
| | Audio in / out | – | 1/– |
| | Transcoding at the edge | ■ | ■ |
| Storage | Type | CF | CF |
| | Capacity | 2 TB | 2 TB |
| Intelligence | Direct-to-iSCSI | – | – |
| | Video Analytics | – | – |
| Interfaces | Alarm In | 4 | 4 dry contacts, 2 monitored tamper alarm (With MIC IP 7000) |
| | Alarm Out | 1 | 3 |
| | Relay Out | – | 1 (for washer pump) (with MIC IP 7000) |
| | Network (PoE) | – | 1x 10/100/1000Base-TX |
| | Network UTP | – | 2x 10/100/1000Base-TX |
| | Network fiber | – | 2 SFP Sockets (1000Base-FX) |
| | Network daisy chain | – | ■ (up to 50) |
| 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-463-90 | UML-553-90 |
|------------------------------------|---------------------------------|--------------|--------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Display | Type | 19" LED | 22" LED | 27" LED | 32" LED | 42" LED | 46" LED | 55" LED |
| | Max Pixel Resolution | 1366 x 768 | 1920 x 1080 | 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 | 650 TVL |
| | Aspect Ratio | 16:9 | 16:9 | 16:9 | 16:9 | 16:9 | 16:9 | 16:9 |
| | Brightness (cd/m ²) | 250 | 250 | 300 | 350 | 500 | 450 | 450 |
| | Contrast Ratio | 1000:1 | 1000:1 | 3000:1 | 3000:1 | 4000:1 | 3500:1 | 4000:1 |
| | Backlight | 30,000 hours | 30,000 hours | 30,000 hours | 50,000 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° | 178° x 178° |
| Composite Video/Audio Loop-through | | passive | passive | passive | passive | passive | passive | passive |
| PC Compatible | | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Connectors | Composite Video (BNC) | – | – | 2 (looping video) | 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 | 1024 mm | 1256 mm |
| | Height | 332 mm* | 370 mm* | 380 mm | 440 mm | 570 mm | 578 mm | 727 mm |
| | Depth | 182 mm* | 182 mm* | 76 mm | 77 mm | 83 mm | 112 mm | 83 mm |
| | Weight | 3.0 kg | 3.6 kg | 9.1 kg | 12.5 kg | 20 kg | 25 kg | 32 kg |
| Power | Power Supply | integrated | integrated | included | integrated | integrated | integrated | integrated |
| | Power Consumption | 42W | 42W | 75W | 75W | 150W | 149 w | 170W |
| Misc. | Picture-in-picture | – | – | – | – | – | – | – |
| | Front Panel Lockout | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | IR Remote | – | – | – | ■ | ■ | ■ | ■ |
| Cables Included | VGA-to-VGA | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | DVI-to-DVI | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Mounting | VESA Compliant | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | Rack-mountable | – | – | – | – | – | – | – |
| | Table Stand | included | included | included | UMM-LED32-SD | UMM-LED42-SD | UMM-LED46-SD | UMM-LED42-SD |
| | Fixed Wall Mount | – | – | – | – | ST650 | ST650 | ST650 |
| | Swivel/Tilt Wall Mount | – | – | UMM-WMT-32 | UMM-WMT-32 | – | – | – |

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