DINION IP ultra 8000 MP

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BOSCH
Invented for life

- ▶ 12MP (4K UHD) for exceptional detail
- ▶ Extremely high resolution at fast speeds (30 fps)
- ▶ Low network strain and storage costs
- ▶ Outstanding wide dynamic range (92+16 dB)
- ▶ Long distance identification with telephoto lenses

The DINION IP ultra 8000 MP with 12 megapixel resolution offers crisp, clear and extremely detailed images for the most demanding IP video surveillance requirements. It captures 12 megapixel at 20 fps, and 4K UHD at 30 fps, so providing images of fast moving objects in high resolutions. The content-rich image allows effective retrospective analysis at the level of detail that makes the difference when collecting forensic evidence.

The camera offers a wide-angle overview and multiple focus points on a single screen so now you can focus on details without losing the bigger picture.

Versions

The camera is available in the following versions:

- Camera body with permanently attached 5 mm lens.
- Camera body with permanently attached 3.2 mm lens.
- Camera body with C/CS lens mount and motorized focus adjustment.

Three telephoto lenses (75 mm, 50 mm and 35 mm), specifically matched to the camera body, are optionally available.

System overview

Advanced image processing techniques take the DINION IP ultra 8000 MP to the next level. Intelligent Video Analysis tracks and focuses on relevant situations and adds sense and structure to stored video, allowing you to quickly retrieve the correct data. Intelligent Auto Exposure gives superb front and back light compensation, providing you with the perfect picture every time.

Intelligent Dynamic Noise Reduction saves bitrate at the source and only uses bandwidth when needed. This results in up to 50% less bitrate and significantly reduces storage costs and network strain without compromising on video quality.

Functions

Measured dynamic range

The dynamic range of the camera is outstanding and is obvious in real world performance comparisons — 92 dB wide dynamic range for 4K UHD mode (plus an extra 16 dB when combined with Intelligent Auto Exposure).

The actual dynamic range of the camera is measured using Opto-Electronic Conversion Function (OECF) analysis with a standardized test chart based on ISO

standards. This method provides more realistic and verifiable results in comparison with the theoretical approximations sometimes used.

Intelligent Video Analysis
After only 20 minutes you can miss 90% of the activity on a screen. Intelligent Video Analysis (IVA) assists by alerting you when predefined alarms are triggered. By smartly combining up to 8 IVA rules, complex tasks are made easy and false alarms are reduced to a minimum. IVA also adds sense and structure to your video by adding metadata. This enables you to quickly retrieve the relevant images from hours of stored video. Metadata can also be used to deliver irrefutable forensic evidence or to optimize business processes based on people counting or crowd density information.

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.

Intelligent Dynamic Noise Reduction
Quiet scenes with little or no movement require a lower bitrate. By intelligently distinguishing between noise and relevant information, Intelligent Dynamic Noise Reduction reduces bitrate by up to 50%. Because noise is reduced at the source during image capture, the lower bitrate does not compromise on video quality.
Intelligent Dynamic Noise Reduction adjusts spatial and temporal filtering (3DNR) based on intelligent analysis of the scene content. Motion compensated temporal filtering (MCTF) reduces motion blur normally associated with standard temporal filtering. This maintains image quality of fast moving objects while still optimizing bitrate.
With Intelligent Dynamic Noise Reduction, our focus is to significantly reduce storage costs, and lessen network strain by only using bandwidth when needed.

Area-based encoding
Area-based encoding is another feature which reduces bandwidth. Compression parameters for up to eight user-definable regions can be set. This allows uninteresting regions to be highly compressed, leaving more bandwidth for important parts of the scene.

Bitrate optimized profile
The average typical optimized bandwidth in kbits/s for various frame rates is shown in the table:

fps	12MP (4:3)	4K UHD	1080p
30	-	6000	1600
25	-	5678	1514
20	5285	5285	1409
15	5424	4777	1274
10	4612	4062	1083
5	3223	2839	757
2	1388	1223	326

Selectable resolution and aspect ratio
The camera has three basic application variants that can be chosen at start-up to provide the best possible performance for typical applications:
- 12MP (4:3)
- 4K UHD (16:9)
- 1080p (16:9)

The 12MP variant can be used in applications where the highest resolution possible is required. The 4K UHD variant is suitable for applications where the 16:9 4K standard is required with a frame rate of 30 fps. The 1080p30 (16:9) variant is for applications that require extra sensitivity and dynamic range. Each of these variants selects the best possible tuning parameters for the application so that you get the best performance possible from your camera.

Scene modes
The camera has a very intuitive user interface that allows fast and easy configuration. Nine configurable modes are provided with the best settings for a variety of applications. Different scene modes can be selected for day or night situations.
- **Indoor** – general day-to-night changes in an indoor environment without sun highlights or street lighting effects.
- **Outdoor** – general day-to-night changes in an outdoor environment with sun highlights and street lighting effects.
- **Night-optimized** – optimized for details in low light environments.
- **Low bit rate** – reduces bandwidth requirements.
- **Intelligent AE** – optimized for scenes with fluctuating front and back light caused by sunlight or other illuminated objects in the scene.
- **Vibrant** – enhanced contrast, sharpness and saturation.
- **Sports and gaming** – high-speed capture, and improved color rendition and sharpness.
- **Traffic** – for monitoring traffic movement on roads or parking lots. It can also be used in industrial applications where fast moving objects are to be monitored. Motion artifacts are minimized.
- **Retail** – improved color rendition and sharpness with reduced bandwidth requirements.

Multiple streams
The innovative multi-streaming feature delivers various H.264 streams together with an M-JPEG stream. These streams facilitate bandwidth-efficient viewing and recording, plus easy integration with third-party video management systems.

Depending on the resolution and frame rate selected for the first stream, the second stream provides a copy of the first stream or a lower resolution stream.

Stream assignments		
Application variant	**Stream 1**	**Stream 2**
12MP (4:3) @ 20 fps	4000 x 3000	Copy of stream 1
12MP (4:3) @ 15 fps	4000 x 3000	Copy of stream 1
		SD: 640 x 480
		SD ROI: 640 x 480
		upright cropped: 400 x 720
		SD dual ROI: 640 x 480
		800 x 600
4K UHD (16:9) @ 25/30 fps	3840 x 2160	Copy of stream 1
7.3MP (16:9) @ 25/30 fps	3584 x 2016	SD: 768 x 432
		SD ROI: 768 x 432
		upright cropped: 400 x 720
		D1 4:3 cropped: 704 x 480
		SD dual ROI: 768 x 432
4K UHD (16:9) @ 15 fps	3840 x 2160, 3584 x 2016	Copy of stream 1
		SD: 768 x 432
		720p: 1280 x 720
		1080p: 1920 x 1080
		SD ROI: 768 x 432
		upright cropped: 400 x 720
		D1 4:3 cropped: 704 x 480
		SD dual ROI: 768 x 432
1080 (16:9) @ 25/30 fps	1920 x 1080	SD: 768 x 432
		720p: 1280 x 720
		1080p: 1920 x 1080
		SD ROI: 768 x 432
		upright cropped: 400 x 720
		D1 4:3 cropped: 704 x 480
		SD dual ROI: 768 x 432
1080 (16:9) @ 15 fps	1920 x 1080	Copy of stream 1
		SD: 768 x 432
		720p: 1280 x 720
		1080p: 1920 x 1080

Stream assignments		
		SD ROI: 768 x 432
		upright cropped: 400 x 720
		D1 4:3 cropped: 704 x 480
		SD dual ROI: 768 x 432

The third stream uses the I-frames of the first stream for recording; the fourth stream shows a JPEG image at a maximum of 10 Mbit/s.

Regions of interest and E-PTZ
Regions of Interest (ROI) can be user defined. The remote E-PTZ (Electronic Pan, Tilt and Zoom) controls allow you to select specific areas of the parent image. These regions produce separate streams for remote viewing and recording. These streams, together with the main stream, allow the operator to separately monitor the most interesting part of a scene while still retaining situational awareness.
Intelligent Tracking continuously analyses the scene for moving objects. If a moving object is detected, the camera automatically adjusts its settings, including field of view, to optimally capture details of the object of interest.

Easy installation
Power for the camera can be supplied via a Power-over-Ethernet compliant network cable connection. With this configuration, only a single cable connection is required to view, power, and control the camera. Using PoE makes installation easier and more cost-effective, as cameras do not require a local power source.
The camera can also be supplied with power from +12 VDC power supplies. To increase system reliability, the camera can be simultaneously connected to both PoE and +12 VDC supplies. Additionally, uninterruptible power supplies (UPS) can be used to ensure continuous operation, even during a power failure.
For trouble-free network cabling, the camera supports Auto-MDIX which allows the use of straight or cross-over cables.

Storage management
Recording management can be controlled by the Bosch Video Recording Manager (VRM) or the camera can use iSCSI targets directly without any recording software.

Edge recording
Insert a memory card into the card slot to store up to 2 TB of local alarm recording. Pre-alarm recording in RAM reduces recording bandwidth on the network, and extends the effective life of the memory card.

Cloud-based services

The camera supports time-based or alarm-based JPEG posting to four different accounts. These accounts can address FTP servers or cloud-based storage facilities (for example, Dropbox). Video clips or JPEG images can also be exported to these accounts.

Alarms can be set up to trigger an e-mail or SMS notification so you are always aware of abnormal events.

Access security

Password protection with three levels and 802.1x authentication is supported. To secure Web browser access, use HTTPS with a SSL certificate stored in the camera. The video and audio communication channels can be independently AES encrypted with 128-bit keys by installing the optional encryption site license.

Complete viewing software

There are many ways to access the camera's features: using a web browser, with the Bosch Video Management System, with the free-of-charge Bosch Video Client, with the video security mobile app, or via third-party software.

System integration

The camera conforms to the ONVIF Profile S specification. Compliance with this standard guarantees interoperability between network video products regardless of manufacturer.

Third-party integrators can easily access the internal feature set of the camera for integration into large projects. Visit the Bosch Integration Partner Program (IPP) website (ipp.boschsecurity.com) for more information.

Lens options

The permanently attached wide-angled lenses of 5 mm or 3.2 mm are factory mounted and calibrated, and cannot be replaced in the field.

There are three telephoto lenses optionally available for the camera body version:

- a 35 mm lens (LFF-8012C-D35)
- a 50 mm lens (LFF-8012C-D50)
- a 75 mm lens (LFF-8012C-D75)

The separate camera body includes an auto-focus lens wizard to ensure that lenses can be easily focused. The automatic motorized focus adjustment with 1:1 pixel mapping ensures that the camera with these telephoto lenses is always focused accurately.

Housing options

To protect the camera, two housings are optionally available (UHO-POE-10 and UHO-HBGS-x1). When choosing a housing keep the following in mind:

- A camera with a 75 mm telephoto lens is too long for the UHO-POE-10 housing; use the UHO-HBGS-x1 housing instead.
- A camera with a 3.2 mm factory-mounted lens has a restricted view at the edges in the UHO-HBGS-x1 housing; use the UHO-POE-10 housing instead.

DORI coverage

DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-50132-7) for defining the ability of a camera to distinguish persons or objects within a covered area. The maximum distance at which a camera/lens combination can meet these criteria is shown below:

12MP Camera with 3.2 mm lens (120°)

DORI	DORI definition	Distance	Horizontal width
Detect	25 px/m (8 px/ft)	46 m (151 ft)	160 m (525 ft)
Observe	63 px/m (19 px/ft)	18 m (59 ft)	63 m (207 ft)
Recognize	125 px/m (38 px/ft)	9 m (30 ft)	32 m (105 ft)
Identify	250 px/m (76 px/ft)	5 m (16 ft)	16 m (53 ft)

12MP Camera with 5 mm lens (70°)

DORI	DORI definition	Distance	Horizontal width
Detect	25 px/m (8 px/ft)	114 m (374 ft)	160 m (525 ft)
Observe	63 px/m (19 px/ft)	45 m (148 ft)	63 m (207 ft)
Recognize	125 px/m (38 px/ft)	23 m (76 ft)	32 m (105 ft)
Identify	250 px/m (76 px/ft)	11 m (36 ft)	16 m (53 ft)

12MP Camera with 35 mm lens (9.8°)

DORI	DORI definition	Distance	Horizontal width
Detect	25 px/m (8 px/ft)	933 m (3061 ft)	160 m (525 ft)
Observe	63 px/m (19 px/ft)	370 m (1214 ft)	63 m (207 ft)
Recognize	125 px/m (38 px/ft)	187 m (590 ft)	32 m (105 ft)
Identify	250 px/m (76 px/ft)	93 m (295 ft)	16 m (53 ft)

12MP Camera with 50 mm lens (6.8°)

DORI	DORI definition	Distance	Horizontal width
Detect	25 px/m (8 px/ft)	1347 m (4419 ft)	160 m (525 ft)
Observe	63 px/m (19 px/ft)	534 m (1752 ft)	63 m (207 ft)

DORI	DORI definition	Distance	Horizontal width
Recognize	125 px/m (38 px/ft)	269 m (883 ft)	32 m (105 ft)
Identify	250 px/m (76 px/ft)	135 m (443 ft)	16 m (53 ft)

12MP Camera with 75 mm lens (4.7°)

DORI	DORI definition	Distance	Horizontal width
Detect	25 px/m (8 px/ft)	1949 m (6394 ft)	160 m (525 ft)
Observe	63 px/m (19 px/ft)	774 m (2539 ft)	63 m (207 ft)
Recognize	125 px/m (38 px/ft)	390 m (1280 ft)	32 m (105 ft)
Identify	250 px/m (76 px/ft)	195 m (640 ft)	16 m (53 ft)

Typical applications

The camera body with a telephoto lens is especially suitable for use in such applications as:

- Stadiums
- Perimeter surveillance
- Airport priority checkpoint monitoring

Certifications and approvals

| Standards	
Emission	EN 55022 Class B (2010), +AC (2011) FCC: 47 CFR 15, class B (2012-10-1)
Immunity	EN 50130-4 (PoE, +12 VDC)* (2011) EN 50121-4 (2006), +AC: (2008)
Alarm	EN 50130-5 Class II (2011)
Safety	EN 60950-1 UL 60950-1 (2nd edition) CAN/CSA-C 22.2 No. 60950-1
Vibration	Camera with 500 g (1.1 lb) lens as per IEC 60068-2-6 (5 m/s^2, operational)
UHD	SMPTE 2036-2012 Resolution: 3840 x 2160 (UHDTV1) 4K UHD (2160p)
HD	SMPTE 274M-2008 Resolution: 1920x1080
Color representation	ITU-R BT.2020
ONVIF conformance	EN 50132-5-2; IEC 62676-2-3

* All systems where this camera is used must comply with this standard as well.

Region	Certification
Europe	CE
USA	UL

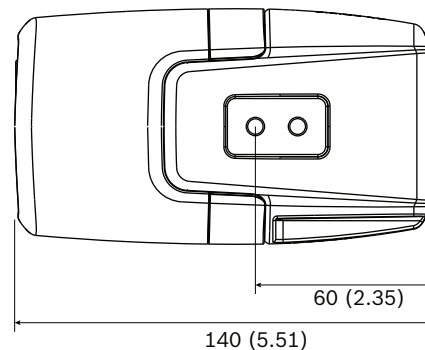| Region	Certification
	FCC
Canada	CSA

Installation/configuration notes

Controls
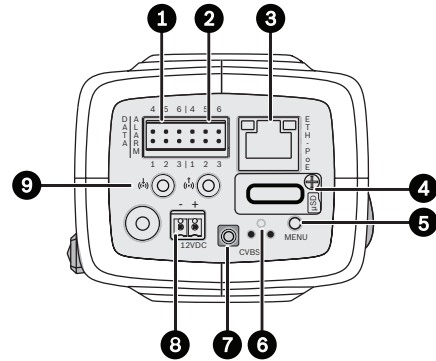
1	Data (RS485/422/232)	6	Reset button
2	Alarm in, alarm out	7	Service video out (SMB connector)
3	10/100 Base-T Fast Ethernet	8	Power supply input (12 VDC only)
4	MicroSD card slot	9	Audio in / Audio out
5	Menu button		

Dimensions

66 (2.60)
78 (3.07)   mm (in)

60 (2.35)
140 (5.51)

3.2 mm lens

121 (4.77)

201 (7.91)

5 mm lens

115 (4.52)

194 (7.66)
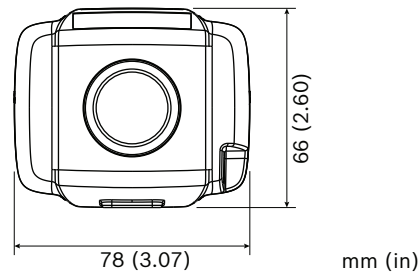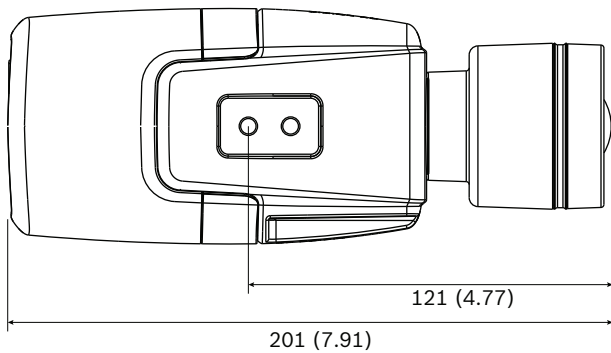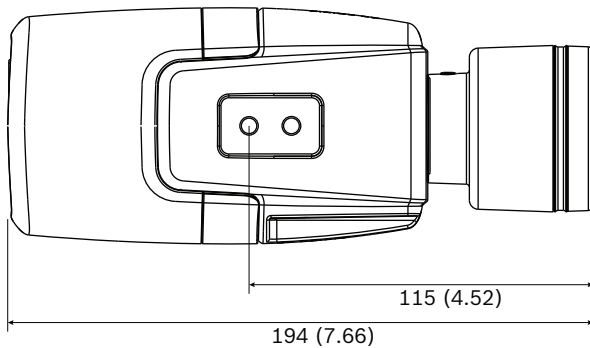
Parts included

The packaging contains:
- DINION IP 8000 camera
- Quick install instructions
- Power connector
- Data/Alarm connector
- Identification labels
- C/CS mount adapter ring for mounting a lens with a C-mount (not supplied for factory fitted lenses)

Technical specifications

Power	
Power Supply	12 VDC; Power-over-Ethernet 48 VDC nominal
Current Consumption	750 mA (12 VDC); 200 mA (PoE 48 VDC)
Power Consumption	9 W
PoE	IEEE 802.3af (802.3at Type 1) Class 3

Sensor	
Type	1/2.3-inch CMOS
Pixels	12 MP

Video performance - Dynamic range	
12 MP (4:3) mode	92 dB WDR (92+16 dB with IAE)
4K UHD (16:9) mode	92 dB WDR

Video performance - Dynamic range	
	(92+16 dB with IAE)
1080p mode	98 dB WDR (98+16 dB with IAE)

Video performance – Sensitivity (permanently attached lens version) (3200K, 89% reflectivity, 30% IRE, F2.45)	
Color (12MP / 4K UHD mode)	0.36 lx
Color (1080p mode)	0.31 lx
Mono (12MP / 4K UHD mode)	0.120 lx
Mono (1080p mode)	0.103 lx

Video performance – Sensitivity (camera body version) (3200K, 89% reflectivity, 30% IRE, F1.2)	
Color (12MP / 4K UHD mode)	0.11 lx
Color (1080p mode)	0.09 lx
Mono (12MP / 4K UHD mode)	0.037 lx
Mono (1080p mode)	0.030 lx

Video streaming	
Video compression	H.264 (MP); M-JPEG
Streaming	Multiple configurable streams in H.264 and M-JPEG, configurable frame rate and bandwidth. Regions of Interest (ROI)
Overall IP Delay	Min. 120 ms, Max. 340 ms
GOP structure	IP, IBP, IBBP
Encoding interval	1 to 30 [25] fps
Encoder regions	Up to 8 areas with encoder quality settings per area

Video resolution (H x V)	
12MP	4000 x 3000 (at 20 fps)
4K UHD	3840 x 2160 (at 30 fps)
7.3MP	3584 x 2016 (at 30 fps)
1080p HD	1920 x 1080 (at 30 fps)
720p HD	1280 x 720 (at 30 fps)
SVGA	800 x 600
D1 4:3 (downscaled/ cropped)	704 x 480
480p SD	Encoding: 704 x 480; Displayed: 854 x 480
432p SD	768 x 432
288p SD	512 x 288

Video resolution (H x V)	
240p SD	Encoding: 352 x 240; Displayed: 432 x 240
144p SD	256 x 144

Video functions	
Day/Night	Color, Monochrome, Auto (adjustable switchover points)
Adjustable picture settings	Contrast, Saturation, Brightness
White Balance	2500 to 10000K, 4 automatic modes, manual mode and measure
Shutter	Automatic Electronic Shutter (AES) Fixed (selectable) Default shutter
Backlight compensation	Off, Auto, Intelligent Auto Exposure
Noise reduction	Intelligent Dynamic Noise Reduction with separate temporal and spatial adjustments
Contrast enhancement	On/off
Sharpness	Sharpness enhancement level selectable
Intelligent defog	Intelligent Defog automatically adjusts parameters for best picture in foggy or misty scenes (switchable)
Privacy Masking	Eight independent areas, fully programmable
Video Motion Analysis	Intelligent Video Analysis
Scene modes	Nine pre-defined modes
Other functions	Image flip, Pixel counter, Video watermarking, Display stamping, Positioning

Audio streaming	
Standard	G.711, 8 kHz sampling rate L16, 16 kHz sampling rate AAC-LC, 48 kbps at 16 kHz sampling rate AAC-LC, 80 kbps at 16 kHz sampling rate
Signal-to-Noise Ratio	>50 dB
Audio Streaming	Full-duplex / half duplex

Input/output	
Analog video out	SMB connector, CVBS (PAL/NTSC), 1 Vpp, 75 Ohm
Audio line in	1 Vrms max, 18 kOhm typical,
Audio line out	0.85 Vrms at 1.5 kOhm typical,
Audio connectors	3.5 mm mono jack
Alarm input	2 inputs
Alarm input activation	+5 VDC nominal; +40 VDC max. (DC-coupled with 50 kOhm pull-up resistor to +3.3 VDC)

Input/output	
	(< 0.5 V is low; > 1.4 V is high)
Alarm output	1 output
Alarm output voltage	30 VAC or +40 VDC max. Maximum 0.5 A continuous, 10VA (resistive load only)
Ethernet	RJ45
Data port	RS-232/422/485

Local storage	
Internal RAM	10 s pre-alarm recording
Memory card slot	Supports up to 32 GB microSDHC / 2 TB microSDXC card. (An SD card of Class 6 or higher is recommended for HD recording)
Recording	Continuous recording, ring recording. alarm/events/schedule recording

Software	
Unit Configuration	Via web browser or Configuration Manager
Firmware update	Remotely programmable
Software viewer	Web browser, Video Security Client, Bosch Video Client, or third party software

Network	
Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, Telnet, ARP, DHCP, NTP (SNTP), SNMP (V1, MIB-II), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox, CHAP, digest authentication
Encryption	TLS 1.0, SSL, DES, 3DES, AES (optional)
Ethernet	10/100 Base-T, auto-sensing, half/full duplex
Connectivity	Auto-MDIX
Interoperability	ONVIF Profile S; GB/T 28181

Environmental	
Operating Temperature	-20℃ to +50℃ (-4℉ to 122℉)
Storage Temperature	-30℃ to +70℃ (-22℉ to +158℉)
Operating Humidity	20% to 93% RH
Storage Humidity	up to 98% RH

Permanently attached lens version

Optical	
Lens mount	Factory mounted
Lens type (NBN-80122-F6A)	5 mm, fixed-focus, fixed-iris lens (70 deg FoV) with minimum object distance of 1.1 m (3.6 ft)
Lens type (NBN-80122-F2A)	3.2 mm, fixed-focus, fixed-iris lens (120 deg FoV) with minimum object distance of 0.45 m (1.5 ft)

Mechanical	
Dimensions (W x H x L)	78 x 66 x 200 mm (3.07 x 2.6 x 7.87 inch) with factory-mounted lens
Weight	860 g (1.90 lb) with 3.2 mm lens 870 g (1.92 lb) with 5 mm lens
Color	RAL 9006 Metallic Titanium
Tripod Mount	Bottom and top 1/4-inch 20 UNC

Camera body version

Optical	
Lens mount	CS mount (C-mount with adapter ring)
Focus control	Motorized back-focus adjustment

Mechanical	
Dimensions (W x H x L)	78 x 66 x 140 mm (3.07 x 2.6 x 5.52 inch) without lens
Weight	690 g (1.52 lb) without lens
Color	RAL 9007 Metallic Titanium
Tripod Mount	Bottom (isolated) and top 1/4-inch 20 UNC

Ordering information

DINION IP ultra 8000 MP
High-performance 12 MP box camera for intelligent 4K UHD surveillance. 12MP; PoE; IAE; IDNR; ROI (E-PTZ); IVA; H.264 quad-streaming; free viewing apps; cloud services; audio/motion detection; 5 mm lens
Order number **NBN-80122-F6A**

DINION IP ultra 8000 MP
High-performance 12 MP box camera for intelligent 4K UHD surveillance. 12MP; PoE; IAE; IDNR; ROI (E-PTZ); IVA; H.264 quad-streaming; free viewing apps; cloud services; audio/motion detection; 3.2 mm lens
Order number **NBN-80122-F2A**

DINION IP ultra 8000 MP
High-performance 12 MP box camera for intelligent 4K UHD surveillance (without lens). 12MP; PoE; IAE; IDNR; ROI (E-PTZ); IVA; H.264 quad-streaming; free viewing apps; cloud services; audio/motion detection, motorized auto-focus
Order number **NBN-80122-CA**

Accessories

LFF-8012C-D35 Telephoto megapixel lens
Fixed telephoto megapixel lens; manual iris, IR corrected, F1.8, 35 mm
Order number **LFF-8012C-D35**

LFF-8012C-D50 Telephoto megapixel lens
Fixed telephoto megapixel lens; manual iris, IR corrected, F2.0, 50 mm
Order number **LFF-8012C-D50**

LFF-8012C-D75 Telephoto megapixel lens
Fixed telephoto megapixel lens; manual iris, F1.8, 75 mm
Order number **LFF-8012C-D75**

Monitor/DVR Cable SMB 0.3M
0.3 m (1 ft) analog cable, SMB (female) to BNC (female) to connect camera to coaxial cable.
Order number **NBN-MCSMB-03M**

Monitor/DVR Cable SMB 3.0M
3 m (9 ft) analog cable, SMB (female) to BNC (male) to connect camera to monitor or DVR
Order number **NBN-MCSMB-3.0M**

UPA-1220-60 Power Supply
Power supply for camera. 120 VAC, 60 Hz In; 12 VDC, 1 A Out; regulated
Order number **UPA-1220-60**

UPA-1220-50 Power Supply
Power supply for camera. 220 VAC, 50 Hz In; 12 VDC, 1 A Out; regulated
Order number **UPA-1220-50**

TC9210U Indoor Camera Mount
universal wall/ceiling grid, for 6-inch, 4.5 kg (10 lb) max load, off-white finish, incl. T-Bar ceiling clip and wall/ceiling mount flange
Order number **TC9210U**

UHO-HBGS-51 Outdoor Housing
Outdoor housing for (230 VAC / 12 VDC) camera. 230 VAC power supply; blower; feed-through cabling
Order number **UHO-HBGS-51**

UHO-HBGS-61 Outdoor Housing
Outdoor housing for (120 VAC / 12 VDC) camera. 120 VAC (60 Hz) power supply; blower; feed-through cabling
Order number **UHO-HBGS-61**

UHO-HBGS-11 Outdoor Housing
Outdoor housing for (24 VAC / 12 VDC) camera. 24 VAC power supply; blower; feed-through cabling
Order number **UHO-HBGS-11**

UHO PoE Outdoor Camera Housing
Outdoor camera housing with PoE input. IP67; cable gland
Order number **UHO-POE-10**

LTC 9215/00 Mount
Wall mount for UHO outdoor housing – 18 cm (7°in.),
cable feed-through
Order number **LTC9215/00**

LTC 9215/00S Mount
Short wall mount for UHO outdoor housing - 30cm
(12°in>), cable feed-through
Order number **LTC9215/00S**

LTC 9219/01 Feed-through J-Mount
for 15-inch, 9 kg (20 lb) max load, for LTC 938x and
LTC 948x series housings, light gray finish
Order number **LTC 9219/01**

LTC 9210/01 Column Mount
Feed-through column mount for 20 cm (8 in.), 9 kg
(20 lb) maximum load. Light gray finish.
Order number **LTC 9210/01**

LTC 9213/01 Pole Mount Adapter
Flexible pole mount adapter for camera mounts (use
together with the appropriate wall mount adapter).
Max. 9 kg (20 lb); 3 to 15 inch diameter pole; stainless
steel straps
Order number **LTC 9213/01**

Software Options

BVIP AES 128 Bit Encryption
Site licence for BVIP AES 128-bit encryption. Enables
encrypted communication between BVIP devices and
management stations
Order number **MVS-FENC-AES**