BOSCH

NBE-7703-ALX Bullet 4MP HDR X 4.7-10mm IP66/67 IK10
DINION 7100i IR

▶ Starlight X technology for next level low-light performance with maximum detail

▶ HDR X - High Dynamic Range to see every detail in both bright and dark areas of the scene without HDR motion blur and artefacts

▶ IVA Pro brings highly reliable deep-learning based detection of persons and vehicles to scenes ranging from sterile zones to crowded and congested

▶ Powerful long range (850nm) intelligent IR illumination up to 80 m (262 ft), optional invisible IR (940nm) or white light

▶ Extremely robust and stable design with exceptional corrosion resistance for any outdoor application including traffic monitoring, critical infrastructure and perimeter security

The NBE-7703-ALX is an extremely robust bullet camera for mission-critical applications. The ruggedized and stable design has exceptional corrosion resistance for use in any outdoor application.

Using 1/1.8" sensors with 4MP resolution, the NBE-7703-ALX provides the perfect balance between high resolution and extreme low light sensitivity. Starlight X and HDR X technology combined with powerful intelligent IR illumination ensure highly detailed images even in the most challenging situations.

The cameras have a powerful, embedded processor with dedicated hardware to support advanced machine learning and deep neural network-based Video Analytics.

Built-in Intelligent Video Analytics Pro (IVA Pro) enriches full situational awareness and triggers relevant alerts.

With the combination of the robust housing, exceptional image quality, and the powerful video analytics, the NBE-7703-ALX is the ideal choice for the most demanding outdoor applications, including traffic monitoring, critical infrastructure, and perimeter security.

Functions

Starlight X - Next level starlight performance
Starlight X technology combines the latest high performance, large pixel sensors, optics, improved image processing and noise suppression, resulting in a 5.5x improved sensitivity compared to the standard starlight camera.

HDR X - High Dynamic Range
HDR X is a new technology that combines unique sensor functionality and advanced algorithms. It is a huge leap forward in capturing high quality video of moving objects in scenes with a large dynamic range. It also allows HDR imaging at lower light levels in which traditional HDR technologies are non-functional.

This is possible because the HDR X - Motion optimized mode takes two different readouts from one exposure to capture details in both the highlights and shadows of the scene, instead of blending multiple exposures like standard HDR technologies. Blending multiple exposures reduces sharpness and creates unwanted imaging artefacts on moving objects. HDR X resolves these issues, providing a crisp image with improved dynamic range.

In case an even larger dynamic range is required, HDR X - Optimized DR or HDR X - Extreme DR will further increase performance to an absolute maximum by adding another fast exposure. This combines the benefits from HDR X -
 Motion optimized and traditional HDR.

Intelligent Video Analytics Pro (IVA Pro)

The camera comes with the IVA Pro Building and the IVA Pro Perimeter pre-installed and brings highly reliable deep-learning based detection and tracking of persons and vehicles to scenes ranging from sterile zones to crowded and congested. Being extremely resistant to false triggers caused by challenging environments with rain, wind (moving trees), snow, hail, and water reflections as well as shadows and bugs, it reliable detects, tracks, and classifies objects. A smart set of alarm and counter rules allows to alert you when predefined alarms are triggered, and to forensically search with high efficiently though recordings. Configuration effort is minimized and made easy by removing the need for calibration.

Additionally, other options can be licensed to optimize the camera analytics for specific enterprise use-cases with the IVA Pro Traffic.

Intelligent Video Analytics Pro (IVA Pro) - optional licenses

With the introduction of IVA Pro Appearance, users can conduct forensic searches based on distinct characteristics, such as color of clothing, bags, hats, or other features, enabling a more precise search of individuals. Furthermore, the integration of IVA Pro Gun Detection enhances security measures by automatically detecting and classifying people brandishing firearms, ensuring comprehensive threat detection.

Additionally, the camera now features IVA Pro Personal Protective Equipment (PPE), designed to detect the proper use of personal protective equipment, which can reduce accident risk and promote health and safety in various environments. IVA Pro Traffic can be licensed to optimize the camera analytics for ITS applications such as counting and classification, as well as Automatic Incident Detection, which are necessary for highway and urban infrastructure planning. IVA Pro License Plate excels in real-time identification of license plates in parking applications or city environments.for automated ticketing systems, traffic enforcement, and smart parking solutions.

IR illumination

The NBE-7703-ALX offers integrated advanced intelligent IR illumination. The IR range covers a distance of up to 80 m (262 ft).

The combination of multiple IR beam angles, linked to the zoom position of the lens, ensure uniform illumination of the full scene, without hot spots or dark corners in any field of view. Intelligent IR ensures a balanced image without over exposure on objects closer to the camera.

Optional invisible IR (940nm) or white light modules are available.

H.265 high-efficiency video encoding

The camera is designed on the most efficient and powerful H.264 and H.265/HEVC encoding platform. The camera is capable of delivering high-quality and high-resolution video with very low network load. With a doubling of encoding efficiency, H.265 has become the new compression standard of choice for IP video surveillance systems.

DORI coverage

DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video 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:

4MP camera with 4.7 - 10 mm lens*

DORI	DORI definition	Distance 4.7 mm/10 mm	Horizontal width
Detect	25 px/m (8 px/ft)	43 m/118 m (134 ft/369 ft)	108 m (336 ft)
Observe	63 px/m (19 px/ft)	17 m/47 m (56 ft/155 ft)	43 m (142 ft)
Recognize	125 px/m (38 px/ft)	9 m/24 m (28 ft/78 ft)	22 m (71 ft)
Identify	250 px/m (76 px/ft)	4 m/12 m (14 ft/39 ft)	11 m (35 ft)

*The numbers in this table do not reflect IVA distances. For IVA distances, refer to the lens calculator / Bosch IP video design tool.

Scene modes

Multiple configurable modes are provided with the best settings for a variety of applications. In one click fully optimized image settings can be selected to suit the conditions. Different scene modes can be selected for different situations such as sodium lighting, fast moving objects, or dark environments.

Resists rain, dust, and tampering with reliable operation across a wide temperature range
Suitable for indoor and outdoor usage.
The robust design of the camera is rated to IP66 / IP67 and IK10 standards, safeguarding the camera against rain and dust while also offering protection against vandalism and tampering.
The camera can operate in a wide ambient temperature range between -50 °C up to +60 °C (-58 °F to +140 °F).

Auto-calibration
The camera offers auto-calibration by transforming 2D pixels into 3D real world measures, such as size, speed and geolocation of objects for tracking use cases. AI technology allows the camera to detect and analyze persons and vehicles in the scene to determine calibration parameters. Calibration efforts are now reduced to a single click, followed by the usual human verification. This reduces the calibration effort or time investment, ensuring optimal accuracy while keeping costs to a minimum.

Electronic image stabilization
The camera incorporates a built-in, electronic Image stabilization and algorithm that allows to sense continuous vibration. If it detects vibration, the device dynamically corrects the shaky video in both vertical and horizontal axis. The Image stabilization function delivers exceptional image clarity and a stable field of view on the monitor.
The EIS crop factor is adjustable. This helps the camera deliver exceptional image clarity, by allowing you to optimize the balance between field of view and the maximum vibration amplitude.

Easy installation
The NBE-7703-ALX uses the proven 3-step installation concept. The mounting plate has multiple hole patterns for installation on electrical boxes (4 inch square and double gang) and on the Bosch Universal Accessories. The back box can be attached with a simple rotate and click. All wires can be connected in the back box.
Power can be supplied through Power-over-Ethernet. 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 design of the camera focuses on robustness and stability. A patented optimized swivel design further helps with the ease of installation.
The swivel has a big-ball joint for optimal stability. When combined with electronic image stabilization, this helps to ensure stable images in challenging environments, such as traffic monitoring.
The camera features a short housing and a big swivel, to ensure maximum stability.
While positioning the camera with the one hand, a locking ring can be tightened with the other hand without using a tool. The camera will stay in position while the swivel can be locked with a locking screw. Once the locking screw is tightened, the locking ring can no longer be untightened by hand.
The camera features a punch down connector for network connection. This helps directly connect bigger cables directly to the camera.
For standard cables, an RJ45 connection is available. For CAT-7 or bigger cables, it is possible to directly punch down the cable on a special connector.
The punch down connector eliminates the need for an external cabinet, where the large diameter cable can be connected to a small patch cable that, in turn, connects to the camera. The large diameter cables can now be directly connected to the camera. The camera is compatible with the Bosch electrical boxes accessories, including a double gang box and a 4 inch square junction box.

Data security
Special measures ensure the highest level of security for device access and data transport. On initial setup, the camera is only accessible over secure channels and enforces a password. Web browser and viewing client access can be protected using HTTPS or other secure protocols that support state-of-the-art TLS 1.2 with updated cipher suites including AES encryption with 256 bit keys. No software can be installed in the camera, and only authenticated firmware can be uploaded. A three-level password protection with security recommendations allows users to customize device access.
Network and device access can be protected using 802.1x network authentication with EAP/TLS. Superior protection from malicious attacks is guaranteed by the Embedded Login Firewall, on-board Trusted Platform Module (TPM) and Public Key Infrastructure (PKI) support.
The advanced certificate handling offers:
- Self-signed unique certificates automatically created when required
- Client and server certificates for authentication
- Client certificates for proof of authenticity
- Certificates with encrypted private keys
- 4096 key length

Advanced edge recording
Advanced edge recording provides the reliable storage solution possible due to the combination of the following functionalities:
- Dual microSD cards that can be set up as either:
    - Mirrored, for redundant storage
    - Failover, for extended service intervals
    - Extended, for maximum retention time
- Industrial microSD card support allows for extreme lifetime
- Health monitoring of industrial microSD cards provide early service indications

Cloud-based services

Using the Bosch Security Cloud, you can configure, troubleshoot, and update supported devices using the browser-based interface or standard tools. With one click on Remote Portal, you can activate additional value-added services, such as Alarm Management in Cloud VMS, or VideoView+. VideoView+ provides an easy-to-use and cost-effective solution to remotely connect to your device from anywhere, at any time. Leverage the power of the Bosch cloud to monitor your premises and get notified about any incident. VideoView+ also enables live streaming, locally and from remote, of up to 8 concurrent devices via Video Security Client, or of up to 4 concurrent devices on the Android and iOS app clients. This includes replay and export functionality, as well as forensic search to define and perform search criteria for recorded events.

Bosch Remote Portal

With the secure cloud infrastructure, Remote Portal, you can manage your connected Bosch devices. From the Remote Portal you can:
- Complete initial configuration of your connected Bosch devices (online or offline).
- Update firmware for single or multiple devices.
- Manage certificates.
- Monitor the health of your connected Bosch devices.

Project Assistant app

As the camera is equipped with a USB-C port for a Wireless installation dongle (sold separately: NCA-WLAN-EU, NCA-WLAN-NA), the installer can easily perform the initial configuration wirelessly. Using a mobile device with the Bosch Project Assistant app, you can do initial set-up and lens zoom-focus to find the right scene. Simply connect the wireless installation dongle and go to the Bosch Project Assistant app, available for iOS, Windows, or Android.
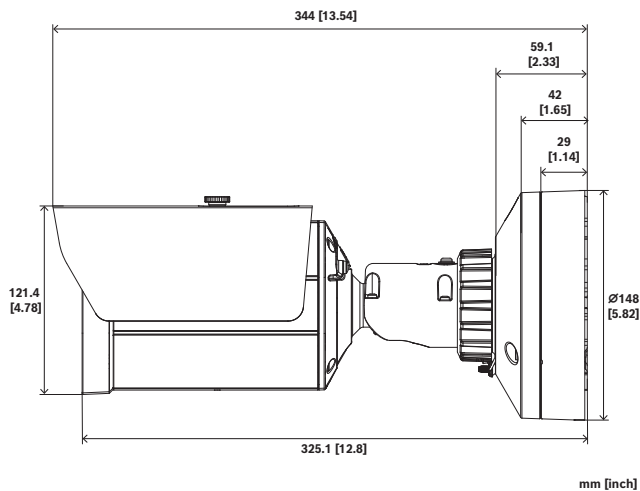
Regulatory information

Type	Standard
Emission	EN 55032 (Class B)
	EN 50121-4
	EN IEC 61000-6-3
	EN IEC 61000-6-4
	CFR 47 FCC part 15 (Class B)
	ICES-003 Issue 7
Immunity	EN 55035
	EN 50130-4
	EN 50121-4
	EN IEC 61000-6-1
	EN IEC 61000-6-2

Type	Standard
	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 61000-4-8
Environmental	EN 50130-5 (Class IV)
	EN 60068-2-2
	EN 60068-2-5
	EN 60068-2-6
	EN 60068-2-18
	EN 60068-2-27
	EN 60068-2-30
	EN 60068-2-42
	EN 60068-2-52
	EN 60068-2-75
	EN 60068-2-78
	TS 2-2003, Section 2 (Environmental requirements)
	EN IEC 63000 (RoHS)
	California Proposition 65
Corrosion resistance	ISO 14993
Safety	IEC 62368-1
	EN 62368-1
	UL 62368-1
	CSA C22.2 No. 62368-1
	IEC 60950-22
	EN 60950-22
	UL 60950-22
	CSA C22.2 No. 60950-22
	IEC 62368-3
	EN IEC 62368-3
	IEC 62471
	EN 62471
Impact protection	EN 62262 (IK10)
Ingress protection	EN 60529 (IP66/IP67)
	NEMA 250 (4X)
ISO 20653	IP6K9K
Marks	CE, cULus, RCM, WEEE, VCCI, CMIM, UKCA

Type	Standard
Compliance	NDAA compliant

Region	Regulatory compliance/quality marks	
Europe	CE	
Global	IEC 62443	Industrial Cyber Security Capability
USA	UL CAP	Cybersecurity Assurance Program
Great Britain	UKCA	

Installation/configuration notes

Dimensions in mm (inch)

Parts included

Quantity	Component
1	NBE-7703-ALX camera
1	TR20 key
1	Mini screwdriver
1	Grommet (IP66)
1	Grommet (IP67)
1	Quick installation guide
1	Safety information
3	Installer UX labels

Technical specifications

Electrical

PoE input	PoE IEEE 802.3af / 802.3at Type 1, Class 3; PoE and auxiliary power can be connected simultaneously for redundant operation
Input voltage (VAC)	24 VAC ±10%
Input voltage (VDC)	12 VDC – 26 VDC ±10%
Power consumption PoE (W) (typical – maximum)	7 W – 12.95 W
Power consumption VAC (VA) (typical – maximum)	12 VA – 25 VA
Power consumption VAC (W) (typical – maximum)	7.10 W – 13 W
Power consumption VDC (W) (typical – maximum)	7.50 W – 16 W

Sensor

Sensor type	1/1.8 inch CMOS
Effective pixels (H x V px)	2688 x 1520; 2.9 µm
Total sensor pixels	4.10 MP approx.

Sensitivity

Low light technology	starlight X
Sensitivity	30 IRE
Color (lx) (sensitivity measured according to IEC 62676 Part 5)	0.009 lx
Monochrome (lx) (sensitivity measured according to IEC 62676 Part 5)	0.0012 lx (0 with IR)
High Dynamic Range (HDR) (dB)	141 dB

Optical

Lens focal length (mm)	4.70 mm – 10 mm
Iris control	P-iris
IR corrected	Yes
Lens aperture (/F)	1.35 /F – 1.97 /F
Zoom/focus control	Motorized

Horizontal field of view (º)	103° – 49°
Vertical field of view (º)	53° – 27°

Night vision

IR function	On; Off; Auto; Intelligent IR
LED	Exchangeable illumination modules: 850 nm (default); 940 nm (optional); white light (optional - available at a later date)
Distance 850 nm IR (default)	80 m | 262 ft
Distance 940 nm invisible IR (optional)	60 m | 197 ft
Illumination intensity	Manually adjustable; Intelligent intensity

Firmware

Common Product Platform	CPP14

Video streaming

Video compression	H.264 (ISO/IEC 14496-10); M-JPEG; H.265/HEVC
Sensor modes	25 fps, HDR X, 2688 x 1520 (4.1 MP); 30 fps, HDR X, 2688 x 1520 (4.1 MP); 50 fps, 2688 x 1520 (4.1 MP); 60 fps, 2688 x 1520 (4.1 MP)
Streaming	4 configurable streams in H.265; H.264 and M-JPEG; Configurable framerate and bandwidth; Bosch Intelligent Streaming (available with future firmware update)
Camera processing latency	<67ms (60 fps)
GOP structure	IP; IBP; IBBP
Frame rate (fps)	1 fps – 60 fps
Video signal-to-noise ratio (dB)	>55 dB
Video Resolution	4.1 MP 2688 x 1520; HD 1080p 1920 x 1080; 1.3 MP 1536 x 864; HD 720p 1280 x 720; SD 432p 768 x 432; 0.1 MP 512x288

Camera installation

Mirror image	On; Off
Image rotation	0°; 90° upright; 180°; 270° upright
Camera LED	Auto disable; Enable; Disable

Video functions

ALC mode	Standard; Fluorescent; Level; Average vs. Peak; Speed; Priority - dark vs. bright
Shutter modes	Automatic Electronic Shutter (AES); 1/15,000 max; Default shutter; 1/1.5625 min
Image stabilization	Electronic
Day/night modes	Auto (adjustable switch points); Color; Monochrome
WDR technology	HDR X; HDR X - Motion Optimized; HDR X -Optimized DR; HDR X - Extreme DR
Camera functionality	Backlight compensation (BLC); Contrast enhancement; Sharpness enhancement; Brightness
White balance (K)	2,000 K – 10,000 K
White balance modes	Basic; Standard; Sodium lamp; Manual mode; Hold mode; 3 automatic modes
Number of privacy masks	8
Display stamping	Name; Logo; Alarm message; Time
Scene modes	Standard; Sodium lighting; Vibrant; Sports & gaming; Retail; Fast movement; Sensitivity boost; Color only; LPR; Backlight

Video content analysis

Analysis type	Intelligent Video Analytics Pro: IVA Pro Buildings; Intelligent Video Analytics Pro: IVA Pro Perimeter
Alarm triggers	Any object; Object in field; Line crossing; Enter / leave field; Loitering; Follow route; Idle / removed object; Counting; Occupancy; Crowd density estimation; Condition change; Similarity search; Objects stopping or starting to move

Object filters	Duration; Size; Aspect ratio; Speed; Direction; Color; Object classes (6)
Perimeter tracking 3D	Ship tracking; Museum mode; Perimeter tracking (2D); People tracking (3D); Base tracking (2D); Traffic tracking (3D)
Calibration	Automatic based on gyro sensor, focal length, and camera height
Number of possible alarm rules (simultaneously)	16
Additional functionalities	Tamper detection
Supported analytics (license)	IVA Pro Appearance; IVA Pro Visual Gun Detection; IVA Pro Personal Protective Equipment; IVA Pro Traffic

Storage

Internal storage	5-s-pre-alarm-recording
Memory card slot	Dual micro SDHC; Dual micro SDXC; Dual micro SD card up to 2 TB
Industrial SD cards	Extreme lifetime and health monitoring support that provides early service indication
Dual SD-card slot configurations	Mirror (redundant storage); Failover (extended service interval); Extend (maximum retention time); Automatic Network Replenishment

Inputs and outputs

Ethernet	Shielded RJ45; Punch down connector
Audio line in	10 kOhm typical; max. 1 Vrms
Audio line out	1.5 kOhm typical; 1 Vrms
Alarm inputs	2; Dry contact; 5 - 40 VDC; 2.2 K end-of-line resistor
Alarm outputs	1; max 30 VAC; +40 VDC; 0.5 A; continuous 10 VA
Power output	12 VDC, max 50mA

Surge protection	1 kV; 1 kA to ground (8/20 μs)
USB	USB 2.0 Type C, for use with Wireless installation dongle for setup and commissioning (sold separately)
Fiber optics (sold separately)	The Fiber Optic Ethernet Media Converter kit (VG4-SFPSCKT) installed inside a Surveillance Cabinet (NBA-7070-PA0, NBA-7070-PA1 or NBA-7070-PA2) provides the fiber optic interface to the mounted camera

Audio

Compression and sampling rate	AAC-LC 48kbps 16 kHz
Minimum signal-to-noise ratio (dB)	>50 dB
Audio streaming	Full duplex; Half duplex

Network

Protocols / standards	IPv4; IPv6; UDP; TCP; HTTP; HTTPS; RTP/SRTP/RTCP; RTSP/RTSPS; IGMP V2/V3; ICMPv6; FTP/Secure FTP; ARP; DHCP; APIPA (Auto-IP, link local address); NTP (SNTP); SNMP (V1, MIBII); SNMP (V3, MIBII); 802.1x, EAP/TLS; DNS; DNSv6; SMTP; iSCSI; DiffServ (QoS); LLDP; SOAP; CHAP; Digest authentication, SCEP
Ethernet type	10/100BASE-T
Conformity	ONVIF Profile S; ONVIF Profile G; ONVIF Profile T; ONVIF Profile M

Data security

Crypto coprocessor (TPM)	RSA 4096 bit; AES/CBC 256 bit
PKI	X.509 certificates
End-to-end encryption	Full end-to-end with supported VMS
Encryption	TLS 1.2; AES 256; AES 128; TLS 1.3
Local storage encryption	XTS-AES
Video authentication	MD5; SHA-1; SHA-256; Checksum
Firmware protection	Signed firmware; Secure boot; Software sealing

Mechanical

Material	Housing: Aluminum with dehumidifying membrane and waterproof connection area
Dimensions (Ø x H) (mm)	148 mm x 115 mm
Dimensions (Ø x H) (in)	5.82 in x 4.52 in
Weight (kg)	2.95 kg
Weight (lb)	6.50 lb
Color (RAL)	RAL 9003 Signal white
Mounting type	Surface-mounted

Environmental

Operating temperature (℃)	-40 ℃ — 60 ℃ PoE; -50 ℃ — 60 ℃ 12VDC/24VAC; Up to 74 ℃ according to NEMA TS 2-2021, para 2.1.5.1 using fig. 2.1 test profile
Operating temperature (℉)	-40 ℉ — 140 ℉ PoE; -58 ℉ — 140 ℉ 12VDC/24VAC; Up to 165 ℉ according to NEMA TS 2-2021, para 2.1.5.1 using fig. 2.1 test profile
Storage temperature (℃)	-40 ℃ – 70 ℃
Storage temperature (℉)	-40 ℉ – 158 ℉
Cold start temperature (℃)	-40 ℃
Cold start temperature (℉)	-40 ℉
Operating relative humidity, non-condensing (%)	5% – 93%
Operating relative humidity, condensing (%)	5% – 100%
Storage relative humidity (%)	0% – 98%
Impact protection	IK10
IP rating	IP66; IP67; IP6K9K
Degree of protection	NEMA type 4X

NBE-7703-ALX Bullet 4MP HDR X 4.7-10mm IP66/67 IK10
Fixed bullet camera 4MP with starlight X, HDR X, IVA Pro Buildings, IVA Pro Perimeter, IP67, IK10, H.265, IR, 4.7-10 mm lens
NDAA compliant
Order number **NBE-7703-ALX**

Accessories
NDA-U-PMAL Pole mount adapter large
Universal pole mount adapter, white; large
Order number **NDA-U-PMAL**

NDA-U-CBB Conduit back box, 148mm
Outdoor conduit back box, 148mm
Order number **NDA-U-CBB**

NCA-WLAN-EU Wireless installation dongle EU
Wireless installation dongle for wireless commissioning
Order number **NCA-WLAN-EU**

NCA-WLAN-NA Wireless installation dongle NA
Wireless installation dongle for wireless commissioning for North America
Order number **NCA-WLAN-NA**

MSD-064G IP SECURITY MICROSD CARD 64GB
64 GB industrial microSD card with health status monitoring
Order number **MSD-064G**

MSD-128G IP SECURITY MICROSD CARD 128GB
128 GB industrial microSD card with health status monitoring
Order number **MSD-128G**

MSD-256G IP SECURITY MICROSD CARD 256GB
256 GB industrial microSD card with health status monitoring
Order number **MSD-256G**

NPD-3001-WAP Portable installation tool
Bosch camera portable and wireless installation tool
Order number **NPD-3001-WAP**

NBA-7070-LI Illuminator module invisible 940nm wide
Invisible light illuminator module, 940 nm, wide
Order number **NBA-7070-LI**

NCA-U-PIG Push-in grommet IP66 patch comp. 25pcs
Push-in grommet IP66 patch comp. 25pcs
Order number **NCA-U-PIG**

NCA-U-PIGS Push-in grommet IP67 4.5-7.5mm 25pcs
Push-in grommet IP67, 4.5-7.5mm, 25pcs
Order number **NCA-U-PIGS**

NCA-U-PIGL Push-in grommet IP67 7.5-10mm 25pcs
Push-in grommet IP67, 7.5-10m, 25pcs
Order number **NCA-U-PIGL**

NBA-7070-PA0 Surveillance cabinet 24VAC
Surveillance cabinet, 24 VAC, IK10
Order number **NBA-7070-PA0**

NBA-7070-PA1 Surveillance cabinet 120VAC
Surveillance cabinet, 120 VAC, IK10
Order number **NBA-7070-PA1**

NBA-7070-PA2 Surveillance cabinet 230VAC
Surveillance cabinet, 230 VAC, IK10
Order number **NBA-7070-PA2**

Software Options

MVC-IVA-TRA IVA Pro Traffic
Video analytics software based on deep neural network
technology for traffic monitoring and Automatic
Incident Detection.
Order number **MVC-IVA-TRA**

MVC-IVA-APC IVA Pro Appearance
Video analytics software based on deep neural network
technology for extracting people appearance for a later
forensic search; can be used as a surveillance or
counting solution
Order number **MVC-IVA-APC**

MVC-IVA-PPE IVA Pro PPE
Video analytics software based on deep neural network
technology for detecting personal protective
equipment.
Order number **MVC-IVA-PPE**

MVC-IVA-LPR IVA Pro License Plate
Video analytics software based on deep neural network
technology for detecting license plate information.
Order number **MVC-IVA-LPR**

MVC-IVA-MMR IVA Pro Vehicle Make Model
Video analytics software based on deep neural network
technology for detecting vehicle information.
Order number **MVC-IVA-MMR**

MVC-IVA-DGS IVA Pro Dangerous Good Signs
Video analytics software based on deep neural network
technology for detecting dangerous good signs.
Order number **MVC-IVA-DGS**

MVC-IVA-LPRX IVA Pro License Plate + Make Model
Video analytics software based on deep neural network
technology for detecting license plate and vehicle
information.
Order number **MVC-IVA-LPRX**

MVC-IVA-VGD IVA Pro Visual Gun Detection
Video analytics software based on deep neural network
technology, designed to detect upright persons and
brandished guns.
Order number **MVC-IVA-VGD**

MVC-IAA-GUN Gunshot Detector License, perpetual
Gunshot Detector License, perpetual
Order number **MVC-IAA-GUN**

https://www.boschsecurity.com