BOSCH

NDP-7602-Z30K PTZ 2MP 30x starlight IK10 pendant
AUTODOME inteox 7000i

- ▶ Open platform that allows third-party apps from the Application store from Security & Safety Things

- ▶ Starlight technology with excellent low-light performance and High dynamic range of 120 dB to see detail in difficult light conditions

- ▶ Flexible streaming capabilities powering three independent streams

- ▶ Built-in Intelligent Video Analytics alert operators in case of unusual scene activity

- ▶ Exceptional reliability with 3-year warranty (including on moving parts)

Certifications and approvals

For a full list of all related certifications/standards, refer to the Product Tests Report, available on the online catalog, on the Documents tab of the product page for your device. If the document is unavailable on the product page, contact your sales representative.

Electromagnetic compatibility (EMC)	FCC Part 15, ICES-003 EN 55024:2010 + A1:2015 EN 55032:2015/AC:2016
Product Safety	Complies with UL, CE, CSA, EN, and IEC standards including: UL 62368-1 EN 62368-1 EN 60950-1 CAN/CSA-C22.2 No. 62368-1-14 IEC 62368-1 Ed.2 IEC 60950-1 Ed.2 IEC 60950-22 Ed.2
Marks	UL, CE, WEEE, RCM, EAC, VCCI, FCC, RoHS

Region	Regulatory compliance/quality marks	
Europe	CE	Declaration of Conformity (DoC) - AUTODOME IP starlight 7000i

Parts included

Quantity	Component
1	AUTODOME inteox 7000i pendant camera
1	Safety instructions
1	Quick Installation Guide

Technical specifications

Imager	1/2.8 in. CMOS sensor
Effective Picture Elements (Pixels)	1944 x 1212 (2.35 MP)
Lens	30x motorized Zoom 4.3 mm to 129 mm F1.6 to F4.7
Field of View (FOV)	2.3° to 64.7°

Focus	Automatic with manual override
Iris	Automatic with manual override
Digital Zoom	12x
Day/Night switch	Automatic IR cut filter

Video performance - Sensitivity

(3100K, reflectivity 89%, 1/30, F1.6, 30 IRE)

Color	0.0077 lx
Monochrome	0.0008 lx

Video performance - Dynamic range

High dynamic range	120 dB WDR
Measured according to IEC 62676 Part 5	100 dB WDR

Common Product Platform	CPP13

DORI		Distance to object	
	WIDE 1X	TELE 30X	Scene width
Detection 25 px/m (8 px/ft)	61 m (200 ft)	1913 m (6276 ft)	77 m (252 t)
Observation 63 px/m (19 px/ft)	24 m (79 ft)	765 m (2510 ft)	31 m (100 ft)
Recognition 125 px/m (38 px/ft)	12 m (39 ft)	383 m (1255 ft)	15 m (50 ft)
Identification 250 px/m (76 px/ft)	6 m (20 ft)	191 m (628 ft)	8 m (25 ft)

Modes for viewing the video area of pre-position settings	Automatic exposure, either full-screen or defined to a specific area Focus

Gain control	AGC, Fixed, Region per pre-position
Aperture Correction	Horizontal and vertical
Electronic Shutter Speed (AES)	1/1 sec to 1/30,000 sec (22 steps)
Signal-to-Noise Ratio (SNR)	>55 dB
Backlight compensation (BLC)	On / Off / Intelligent Auto Exposure (IAE)

White balance	2000 K to 10,000 K ATW, AWB Hold, Extended ATW, Manual, Sodium Lamp Auto, Sodium Lamp, indoor, outdoor
Day/Night	Monochrome, Color, Auto
Defog mode feature	Improves visibility when viewing foggy or other low-contrast scenes.

Noise Reduction	Intelligent Dynamic Noise Reduction

Sectors	4, 6, 8, 9, 12, or 16 user-selectable, independent Sectors, each with 20 characters per Title
Privacy Masks	32 individually configurable Privacy Masks; maximum 8 per Pre-position; programmable with 3, 4 or 5 corners; select your own color from the color palette. With the "Auto" option, the camera selects the most prevalent of the three colors in the background scene as the pattern color. With the "Mosaic" option, the movements behind a Privacy Mask will remain visible.
Virtual Masks	24 individually configurable Virtual Masks to hide parts of the scene (background motion such as moving trees, pulsating lights, busy roads, etc.)
Pre-positions	256 Pre-positions, each with 20 characters per Title
Guard Tours	Custom Recorded Tours - two (2), total duration 30 minutes: Pre-position tour - one (1), consisting of up to 256 scenes consecutively, and one (1) customized with up to 256 user-defined scenes
Supported Languages	English, Czech, Dutch, French, German, Italian, Polish, Portuguese, Russian, Spanish, Japanese, Chinese
Alarm control	Rules-based logic supports basic and complex pre-defined user-specified commands In its most basic form, a "rule" could define which input(s) should activate which output(s).
Camera status monitoring	Integrated sensors monitor operational status such as internal temperature, humidity level, incoming voltage level, vibration, and shock events.
Diagnostics	Various status conditions are tracked in the internal diagnostic log. Critical fault conditions will also be displayed on screen.

Video content analysis

Analysis type	Intelligent Video Analytics

Configurations	Off / Global VCA / Profiles 1 - 16
Calibration	Automatic self-calibrating when height is set
Alarm rules (combinable)	Any object, Object in field, Crossing line, Entering field, Leaving field, Loitering, Following route, Idle object, Removed object, Counter, Occupancy, Crowd detection, Condition change, Similarity search, Tampering
Object filters	Duration, Size, Aspect ratio v/h, Speed, Direction, Object classes (Upright persons, Bikes, Cars, Trucks), Color
Standard/Video compression	H.265, H.264 (ISO/IEC 14496), M-JPEG, JPEG
Streaming	3 fully configurable streams, with the option to activate or deactivate VCA overlays on each stream
Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, noip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox™, CHAP, digest authentication
Ethernet	100BASE-TX, auto-sensing, full duplex/auto negotiation, Auto-MDI-X
Encryption	TLS1.0/1.2, AES128, AES256
Ethernet connector	RJ45
GOP structure	IP, IBP, IBBP
Overall IP Delay	30 fps: 233 ms (typical)
Interoperability	ONVIF Profile S, ONVIF Profile G, ONVIF Profile T

Resolution (H x V)	Pixels
1080p HD	1920 x 1080
720p HD	1280 x 720
432p SD	768 x 432
288p SD	512 x 288

The table that follows shows the average typical optimized bitrate, in kbits/s, for different frame rates:

FPS	H.264	H.265
30	2470	2060
25	2410	1810
15	1690	1260
8	1090	820
4	670	500
2	420	310
1	260	190

Actual bitrate may vary depending on the scene, picture settings, and encoder profile settings.

Memory Card Slot	User-supplied full SD card (maximum 2 TB) Note: For this camera, Bosch does not recommend the use of microSD cards or of microSD to SD adapters.
Recording	Continuous recording of video and audio, alarm/events/schedule recording

Pan Range	360° cont.
Tilt Angle	18° above horizon
Pre-position Speed	Pan: 400°/s Tilt: 300°/s
Pan/Tilt Modes	
• Turbo Mode (Manual Control)	Pan: 0.1°/s - 400°/s Tilt: 0.1°/s - 300°/s
• Normal Mode	0.1°/s-120°/s
Pre-position Accuracy	± 0.1° typ.

Input voltage	24 VAC 60 W (using the midspan accessory NPD-6001B, required to power the heater) 30 W (IEEE 802.3at, class 4 standard, when used without powering the heater)
Power Consumption (typical), with heaters	51.0 W / 54.0 VA
Power Consumption (typical)	19.2 W / 33.6 VA (heaters off / without heater connected in 24 V power supply box)
Current consumption, 24 VAC	~2.25A

Current consumption, 60 W	~0.91A
Redundant configuration	Connect a 30 W or a 60 W midspan[1] and a separate 24 VAC power source. If either power source fails, the camera switches automatically to the other power source.
Surge suppression	Built-in surge suppression for power, data, and network interfaces (Refer to the A&E Specifications for details.)

Power, Network	RJ45 100Base-T
Power, Camera	24VAC, 50/60Hz
Alarm Inputs (7)	2 supervised, 5 non-supervised
Alarm Outputs (4)	1 dry contact relay, 3 open collector/transistor outputs Programmable for "normally open" or "normally closed" 32 VDC @ 150 mA maximum
Audio	1 x mono line in, 1 x mono line out Signal line in: 20 kOhm typical, 0.707 Vrms Signal line out: 0.707 Vrms at 16 Ohm, typical

Ingress Protection Rating/Standard	IP66, NEMA 4X[3]
Operating temperature (with heater wired)	-40 to +55 ℃ (-40 to +131 ℉) -10 to +55 ℃ (+14 to +131 ℉) (without heater wired) Maximum temperature: 74 ℃ (165 ℉) in accordance with NEMA TS 2-2003 (R2008)
Storage temperature	-40 to +60 ℃ (-40 to +140 ℉)
Operating Humidity	0% to 100% RH, condensing
Vibration	IEC 60068-2-6 NEMA TS2 Section 2.2.8
Shock	IEC 60068-2-27 NEMA TS2 Section 2.2.9
Power Service Transients	NEMA TS2 Section 2.2.7.2

Power Interruption	NEMA TS2 Section 2.2.10
Salt Mist Spray (Corrosion Test)	IEC 60068-2-52
External Mechanical Impact	IEC 60068-2-75: IK10 (only models ending in "-K")
	3. NEMA 4X for: -Access to Hazardous parts -Ingress of solid foreign objects (falling dirt, circulating dust, settling dust) -Ingress of water (dripping and light splashing, hose down and splashing)

-Corrosive agents

Meets requirements for NEMA 4X certification (only models ending in "-K").

Meets requirements for NEMA 4X, except impact test (only pendant models, non-IK10).

Dimensions	224 mm (8.8 in.) x 299.4 mm (11.8 in.)
Weight	3.2 kg (7 lb)
Bubble Size	153.1 mm diameter (6.03 in.)
Construction Material , Housing	Cast aluminum
Construction Material , Bubble	Nylon
Standard Color	White (RAL 9003)
Standard Finish	Powder coated, sand finish

Ordering information

NDP-7602-Z30K PTZ 2MP 30x starlight IK10 pendant
PTZ dome camera, 2MP, 30x, starlight imaging, H.265, IVA, open camera platform
Outdoor pendant mount, IK10
Order number **NDP-7602-Z30K | F.01U.381.162 F.01U.386.561**

Services
EWE-AD7IIP-IW 12mths full wrty ext AD 7x00i Series
12 months warranty extension
Order number **EWE-AD7IIP-IW | F.01U.382.507**