

NDP-7803S-Z30L PTZ 4MP 30x IP66 pendant IR GenAI+ AUTODOME 7100s IR



- ▶ High-performance 4MP 30x PTZ at 60 fps starlight and HDR X for superior low-light clarity and balanced detail in bright and dark areas without motion artifacts
- ▶ 550 m (1804 ft) IR illuminator detection distance
- ▶ IVA Pro brings highly reliable deep-learning based detection of persons and vehicles to scenes ranging from sterile zones to crowded and congested
- ▶ GenAI to help users to understand what is happening and why it matters
- ▶ Electronic image stabilization (EIS) to reduce the impact of vibrations on the image
- ▶ Highest level of cybersecurity with Secure Element (EAL6+) FIPS 140-3 Level 3 certified

This high performance, AI-powered PTZ camera with integrated IR is designed to provide superior low-light and no-light performance for outstanding image quality. Equipped with a 4MP 1/1.8-inch sensor and 30x optical zoom lens, it ensures sharp focus details and excellent color reproduction even under challenging lighting conditions.

The HDR X technology is ideal for PTZ cameras. With the HDR X - Motion optimized feature, operators can use HDR imaging in scenes with challenging light levels without seeing blur when the camera is moving.

Built on the CPP16 platform, it offers fully configurable quad video streaming and generative AI (GenAI).

A powerful, embedded processor with dedicated hardware supports advanced machine learning and neural-network-based Intelligent Video Analytics (IVA). Built-in, application-specific IVA Pro packages such as IVA Pro Buildings, IVA Pro Perimeter, and IVA Pro Privacy, provide superior intelligence at the edge.

The design gives undistorted, high-resolution video above the horizon, which is helpful in city landscapes that are not flat.

Functions

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:

DORI	DORI definition	Distance	Horizontal width
Detect	25 px/m	91 m / 2794 m	102 m
	8 px/ft	299 ft / 9167 ft	335 ft
Observe	63 px/m	36 m / 1109 m	41 m
	19 px/ft	118 ft / 3638 ft	135 ft
Recognize	125 px/m	18 m / 559 m	20 m
	38 px/ft	59 ft / 1834 ft	66 ft
Identify	250 px/m	9 m / 280 m	10 m
	76 px/ft	30 ft / 919 ft	33 ft

Regulatory information

Type	Standard
Emissions	EN 55032, Class A EN 55035 FCC: 47 CFR Part 15 B, Class A ICES-003 Issue 2:2020 ICES - Gen Issue 2:2024 CISPR 32 & 35 RCM: AS/NZS CISPR 32 VCCI-CISPR 32:2016.
Immunity	EN 50130-4 EN 50121-4 (Railway applications)
Environmental	IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-6 IEC 60068-2-27 IEC 60068-2-30
Safety	CAN/CSA C22.2 No. 62368-1-19, Ed. 3 EN 62368-1 Ed.2 and Ed.3 UL 62368-1 Ed.3 IEC 62368-1 Ed.2 IEC 60950-22 (needed for Ed. 3 of IEC/EN 62368-1 Ed.2) IEC 62471 [IR models only]
Image performance	IEC 62676-5
HD	SMPTE 296M-2001 (Resolution: 1280x720) SMPTE 274M-2008 (Resolution: 1920x1080)
Color representation	ITU-R BT.709-6
ONVIF conformance	EN 50132-5-2 EN 62676-2
Impact protection	EN 62262 (IK10)
Water/dust protection	EN 60529 (IP66) UL50E (Type 4X)
Marks	UL, CE, WEEE, RCM, FCC, RoHS, VCCI, BIS
Cybersecurity	IEC 62443-1-1 IEC 62443-2 FIPS 140-2 Level 3 FIPS 140-3 Level 3
Compliance	NDAA and TAA compliant

Region	Regulatory compliance/quality marks	
Global	IEC 62443-4-1	Industrial Cyber Security Capability
USA	UL 2900-2-3 CAP	4791462681-003 Cybersecurity Assurance Program
Global	IEC 62443	DK-174558-UL

Installation/configuration notes

For more options, see [Camera Accessories - Quick Selection Guide](#).

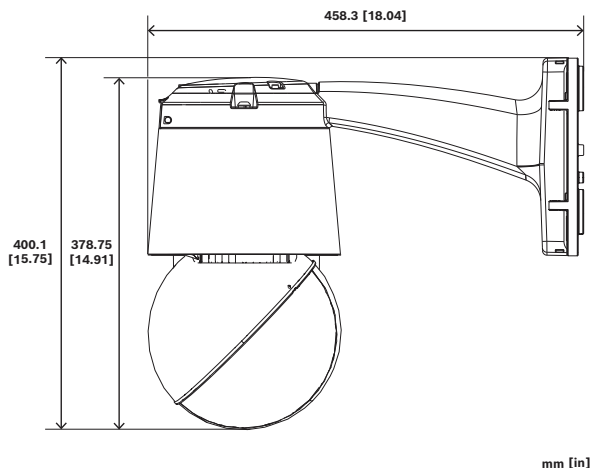


Fig. 1: Dimensions in mm (in.) of camera on NDA-7100-PEN | -F + NDA-PEND-WPLATE

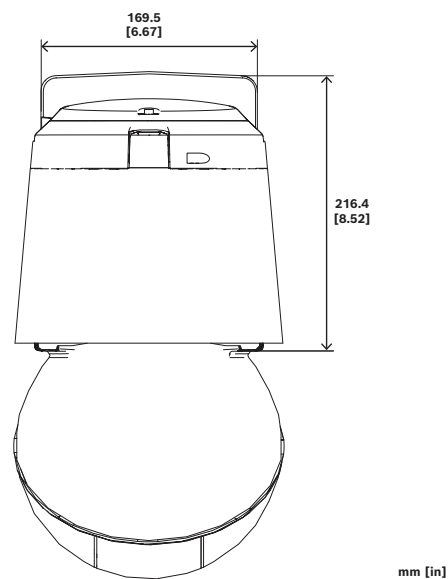


Fig. 2: Dimensions in mm (in.) of the camera on NDA-7100-PEN | NDA-7100-PENF (front view)

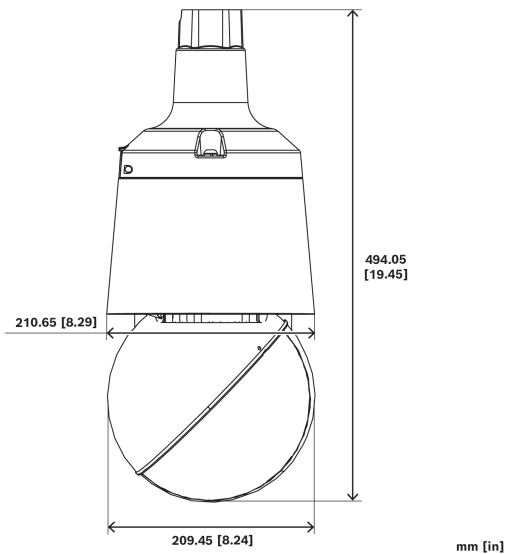


Fig. 3: Dimensions in mm (in.) of camera installed on NDA-7100-PIPE | NDA-7100-PIPEF (pipe mount)

Parts included

Quantity	Component
1	AUTODOME 7100s IR camera
1	Quick Installation Guide
1	Safety instructions
3	Identification labels

Technical specifications

Sensor

Sensor type	1/1.8 inch CMOS
Total sensor pixels	4 MP approx.
Effective pixels (H x V)	2560 x 1440

Optical

Lens zoom (x)	30x
Digital zoom (x)	16x
Lens focal length (mm)	6.6 mm – 198 mm
Lens aperture (f/F)	F1.5 - F4.8
Horizontal field of view (°)	58.7° – 2.2°

Sensitivity

Low light technology	starlight
Color (lx) (sensitivity measured according to IEC 62676 Part 5)	0.0168 lx

Monochrome (lx) (sensitivity measured according to IEC 62676 Part 5)	0.0017 lx
With IR	0.0 lx

Dynamic range

WDR technology	HDR X
High Dynamic Range (HDR) (dB)	133 dB

Night vision

Wavelength (nm)	850 nm
IR intensity	Manually adjustable; Automatic
Maximum detection distance IR (m)	550 m
Maximum detection distance IR (ft)	1804 ft

PTZ functions

Pan range (°)	0° – 360° continuous
Pan speed (°/s)	0.01°/s – 400°/s
Tilt range (°)	-90 to +20 (Auto-flip 220°)
Tilt speed (°/s)	0.01°/s – 300°/s
Guard Tours	Custom Recorded tours: two (2), maximum total duration 15 minutes (depending on the amount of commands sent during recording); Pre-position tour - one (1), consisting of up to 256 scenes consecutively, and one (1) customized with up to 256 user-defined scenes
Number of pre-positions	256, each with 40 characters per title
Pre-position accuracy (average) (°)	± 0.10° typ.
Other functions	Snap to zoom

Platform

Common Product Platform	CPP16
Memory (RAM) (MB)	8192 MB; 16384 MB Flash

Video streaming

Sensor mode	25 fps, HDR X; 30 fps, HDR X; 50 fps, single exposure; 60 fps, single exposure
Resolution	1920 x 1080; 1280 x 720; 2560 x 1440; 960 x 544; 640 x 360; 480 x 272; 520 x 184
Frame rate (fps)	1 fps – 60 fps

Streaming	Multiple configurable streams in H.265; H.264 and M-JPEG; Configurable framerate and bandwidth; Intelligent Streaming
Video compression	H.264 (ISO/IEC 14496-10); M-JPEG; H.265/HEVC
GOP structure	IP; IBP; IBBP

Video functions

Image stabilization	Electronic
Day/night modes	Auto (adjustable switch points); Color; Monochrome
Gain control	AGC
Camera functionality	Intelligent defog; Pixel counter
Backlight compensation	On/Off
White balance (K)	2,000 K – 10,000 K
White balance modes	Basic auto; standard auto; manual RGB; Sodium lamp auto
Number of privacy masks	32
Privacy masks pattern	Black; White; Gray; Auto; Custom Color (16M colors)
Shutter modes	Automatic Electronic Shutter (AES); 1/1 min; 1/30,000 max
Scene modes	Sodium; Backlight, Low Background; Standard; Vibrant; Sports & gaming; Fast movement; Sensitivity boost; Color only; Illuminator; Custom modes
Display stamping	Name; Logo; Date/time; Alarm message
Number of sectors	4, 6, 8, 9, 12, or 16 user-selectable, independent Sectors, each with 40 characters per Title
Virtual masks	24 individually configurable Virtual Masks to hide parts of the scene (background motion such as moving trees, pulsating lights, busy roads, etc.)

Video content analysis

Analysis type	Intelligent Video Analytics Pro: IVA Pro Buildings; Intelligent Video Analytics Pro: IVA Pro Perimeter; IVA Pro Privacy
Supported analytics (license)	Separate licenses are available for IVA Pro Traffic; IVA Pro Intelligent Tracking; IVA Pro Visual Gun Detection; IVA Pro Appearance; IVA Pro Personal Protective Equipment (IVA Pro PPE)
GenAI+	Yes (available in Q4 2026)

Alarm triggers	Any object; Object in field; Line crossing; Enter / leave field; Loitering; Follow route; Idle / removed object; Counting; Occupancy; Condition change; Similarity search; Tampering; Rule based alarms and tracking; Audio detection
Geolocation	Tracking of object locations
Object filters	Duration; Size; Aspect ratio; Speed; Direction; Color
Object classes	Person; Bike; Car; Truck
Calibration	Map-based; Measurement-based; 3D Autocalibration
Additional functionalities	Intelligent tracking; Detect moving objects during PTZ; Tamper detection
Tracking modes	Base tracking (2D); Perimeter tracking (2D); Perimeter tracking (3D); People tracking (3D); Museum mode (2D); Ship tracking (2D); Traffic tracking (2D); Traffic tracking (3D)

Storage

Internal storage	Memory card micro SD; 5-s-pre-alarm-recording
Memory card slot	microSD, microSDHC, microSDXC
Memory card capacity	Up to 2 TB
Industrial SD cards	Extreme lifetime and health monitoring support that provides early service indication

Inputs and outputs

Alarm inputs	2
Alarm outputs	1 dry contact relay, 27VAC, 1 A, rms 30 VDC, 2 A, rms; 3 output lines (selectable N.O./N.C./Common)
Ethernet	Shielded RJ45

Audio

Audio input	Line-in
Audio output	Line-out
Audio streaming	Unidirectional
Compression and sampling rate	G.711 8 kHz; L16 16 kHz; AAC-LC 80kbps 16 kHz; AAC; AAC-LC 48kbps 16 kHz

Network

Protocols / standards	IPv4; IPv6; UDP; TCP; HTTPS; RTP/RTCP; IGMP V2/V3; ICMP; ICMPv6; RTSP; FTP; ARP; DHCP; APIPA (Auto-IP, link local address); NTP (SNTP); SNMP (V1, MIBII); SNMP (V3, MIBII); 802.1x, EAP/TLS; DNS; DNSv6; DDNS (DynDNS.org, self-
-----------------------	--

	HOST.de, no-ip.com); SMTP; DiffServ (QoS); SOAP; CHAP; Digest authentication; DynDNS; MQTT; SRTP; HTTP/HTTPS; HSTST; DDNS (DynDNS.org); MQTTs; Syslog
Ethernet type	Auto-sensing; 100BASE-TX; 1000BASE-T; Full duplex
Conformity	ONVIF Profile S; ONVIF Profile G; ONVIF Profile T; ONVIF Profile M
Cloud services	Stratocast Genetec; Remote Portal
Integration tools	Video SDK; RCP+ SDK

Data security

Crypto coprocessor (TPM) (SE)	RSA 4096 bit for device identity; 512-bit ECC elliptic curves; AES/CBC 256 bit
Public Key Infrastructure (PKI)	X.509 certificates; SCEP; Device identity certificate (Root CA); Embedded firewall
Encryption	TLS 1.2; AES 256; AES 128; TLS 1.3
Network authentication	802.1x; EAP/TLS; CHAP; Digest authentication; Configurable session timeout
Local storage encryption	AES-XTS
Signed video framework	MD5; SHA-1; SHA-256; Checksum
Firmware protection	Signed firmware; Secure boot; Software Sealing; SBOM (Software Bill of Materials); Cloud firmware check
Certified security standards	Common Criteria EAL6+ (Secure Element 3.0); FIPS 140-3 Level 3 (Secure Element 3.0)

Electrical

Input voltage (VAC)	24 VAC 50/60 Hz (IEC 62368-1 Limited Power Source)
Input voltage (VDC)	36 VDC (IEC 62368-1 Limited Power Source)
PoE nominal voltage (VDC)	54 VDC
PoE input, full-function mode	IEEE 802.3bt Type 4, Class 8, 90W
PoE, intelligent power mode	IEEE 802.3bt Type 3, Class 6, 60W
PoE, low power mode	IEEE 802.3bt Type 2, Class 4, 30W
Power consumption VAC (VA) (typical – maximum)	32 VA – 84 VA at 24VAC, 50/60Hz
Power consumption VDC (W) (typical – maximum)	17 W – 66.6 W at 36VDC
Power consumption PoE (W) (typical – maximum)	21 W – 64.8 W at PoE 54VDC

Surge protection	Built-in surge protection for power, data, and network interfaces
------------------	---

Mechanical

Dimensions (Ø x H) (mm)	210.65 mm x 324 mm
Dimensions (Ø x H) (in)	8.3 in x 12.8 in
Weight (kg)	5.5 kg
Weight (lb)	12 lb
Color (RAL)	RAL 9003 Signal white
Material	Aluminum
Bubble material	Clear polycarbonate
Bubble size (mm)	209.6 mm
Bubble size (in)	8.25 in

Environmental

IP rating	IP66
Degree of protection	UL type 4X
Impact protection	IK10
Operating temperature (°C) (IR on)	-40 °C – 50 °C
Operating temperature (°F) (IR on)	-40 °F – 122 °F
Operating temperature (°C) (IR off)	-40 °C - 60 °C
Operating temperature (°F) (IR off)	-40 °F - 140 °F
NEMA TS2 Section 2.2.7 temperature (°C)	Compliant to -34 °C to +74 °C.
NEMA TS2 Section 2.2.7 temperature (°F)	Compliant to -29 °F to +165 °F.
Storage temperature (°C)	-40 °C – 70 °C
Storage temperature (°F)	-40 °F – 158 °F
Operating relative humidity, condensing (%)	0% – 100%
Operating relative humidity, non-condensing (%)	0% – 95%
Storage relative humidity (%)	0% – 95%
Cold start temperature (°C)	-35 °C
Cold start temperature (°F)	-31 °F
Wind load (km/h)	Camera will hold its position in gusts up to 274 km/h

Wind load (mph)	Camera will hold its position in gusts up to 170 mph
Country of origin	Portugal

Ordering information

NDP-7803S-Z30L PTZ 4MP 30x IP66 pendant IR GenAI+
PTZ dome camera, 4MP, 30x optical zoom, integrated IR, HDR X, starlight imaging, IP66, IK10, IVA Pro, GenAI
Order number **NDP-7803S-Z30L**

Accessories

NPD-9001-E Midspan, bt, 90W, IP67
Outdoor midspan with Power-over-Ethernet for use with PoE-enabled cameras; 90 W, single-port
Order number **NPD-9001-E**

NPD-9001-EBT Midspan bt 90W IP67 TAA
Outdoor midspan with Power-over-Ethernet for use with PoE-enabled cameras; 90 W, single-port
TAA compliant
Order number **NPD-9001-EBT**

NDA-6090-PMA Pole mount for midspan, bt, outdoor
Pole mount for outdoor PoE midspans NPD-6001C-E / NPD-6001C-EBT and NPD-9001-E / NPD-9001-EBT
Order number **NDA-6090-PMA**

NDA-7100-PA0H Wall arm & PSU for AD7100i 24VAC
Wall arm + Power supply unit for AUTODOME 7100i cameras, IK10 rating
24 VAC
Order number **NDA-7100-PA0H**

NDA-7100-PA0HF Wall arm & PSU for AD7100i fiber 24VAC
Wall arm + Power supply unit for AUTODOME 7100i cameras, IK10 rating
24 VAC
Direct fiber connection
Order number **NDA-7100-PA0HF**

NDA-7100-PA1H Wall arm & PSU for AD7100i 120VAC
Wall arm + Power supply unit for AUTODOME 7100i cameras, IK10 rating
120 VAC
Order number **NDA-7100-PA1H**

NDA-7100-PA1HF Wall arm & PSU for AD7100i fiber 120VAC
Wall arm + Power supply unit for AUTODOME 7100i cameras, IK10 rating
120 VAC
Direct fiber connection
Order number **NDA-7100-PA1HF**

NDA-7100-PA2H Wall arm & PSU for AD7100i 230VAC
Wall arm + Power supply unit for AUTODOME 7100i cameras, IK10 rating
230 VAC
Order number **NDA-7100-PA2H**

NDA-7100-PA2HF Wall arm & PSU for AD7100i fiber 230VAC

Wall arm + Power supply unit for AUTODOME 7100i cameras, IK10 rating
230 VAC
Direct fiber connection
Order number **NDA-7100-PA2HF**

NDA-U-PSU0H PSU, IR, 24VAC

Power supply unit without transformer, 24 VAC, IK10, for AUTODOME 7100i IR cameras
Order number **NDA-U-PSU0H**

NDA-U-PSU1H PSU, IR, 120VAC

Power supply unit, 120 VAC, IK10, for AUTODOME 7100i / -IR and AUTODOME 7100s / -IR cameras
Order number **NDA-U-PSU1H**

NDA-U-PSU2H PSU, IR, 230VAC

Power supply unit, 230 VAC, IK10, for AUTODOME 7100i / -IR and AUTODOME 7100s / -IR cameras
Order number **NDA-U-PSU2H**

NDA-7100-PEN Pendant arm for AUTODOME 7100i

Pendant arm mount for AUTODOME 7100i and AUTODOME 7100i IR cameras
Order number **NDA-7100-PEN**

NDA-7100-PENF Pendant arm fiber AUTODOME 7100i

Pendant arm with direct fiber connection for AUTODOME 7100i and AUTODOME 7100i IR cameras
Order number **NDA-7100-PENF**

NDA-7100-PIPE Pipe mount for AUTODOME 7100i

Pipe mount for AUTODOME 7100i and AUTODOME 7100i IR cameras
Order number **NDA-7100-PIPE**

NDA-7100-PIPEF Pipe mount fiber for AUTODOME 7100i

Pipe mount with direct fiber connection for AUTODOME 7100i and AUTODOME 7100i IR cameras
Order number **NDA-7100-PIPEF**

NDA-PEND-WPLATE Mounting plate for NDA-7100-PEN/ PENF

Mounting plate for NDA-7100-PEN and NDA-7100-PENF for AUTODOME 7100i and AUTODOME 7100i IR cameras
Order number **NDA-PEND-WPLATE**

NDA-U-WMP Wall mount plate

Back plate for universal wall mount, corner mount and pole mount, white, IP66
Order number **NDA-U-WMP**

NDA-U-CMT Corner mount adapter

Universal corner mount, white
Order number **NDA-U-CMT**

NDA-U-PMT Pendant pipe mount, 12" (31cm)

Universal pipe mount for dome cameras, 31 cm, white
Order number **NDA-U-PMT**

NDA-U-PMAL Pole mount adapter large

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

NDA-U-RMT Pendant parapet mount

Universal roof mount for dome cameras, white, for outdoor usage

Order number **NDA-U-RMT**

LTC 9230/01 Parapet roof mount adapter

Flat roof mount adapter for mounting NDA-U-RMT on a flat surface.

Order number **LTC 9230/01**

NDA-7100-CBL Spare bubble for AUTODOME 7100i IR

Replacement bubble for AUTODOME 7100i and AUTODOME 7100i IR cameras

Order number **NDA-7100-CBL**

NDA-7100-TBL Bubble, tinted for AUTODOME 7100i

Tinted replacement bubble for AUTODOME 7100i and AUTODOME 7100i IR cameras

Order number **NDA-7100-TBL**

NDA-7100-HCBL Bubble, clear hydrophilic AUTODOME 7100i

Clear, hydrophilic replacement bubble for AUTODOME 7100i and AUTODOME 7100i IR cameras

Order number **NDA-7100-HCBL**

NDA-7100-WP Weather protector for AUTODOME 7100i

On-camera weather protector for AUTODOME 7100i and AUTODOME 7100i IR cameras

Order number **NDA-7100-WP**

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**

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-IT IVA Pro Intelligent Tracking

AI-based Intelligent Tracking and video analytics while the camera is moving for applications in crowds and traffic scenes.

Order number **MVC-IVA-IT**

MVC-IVA-APC IVA Pro Appearance

Video analytics software based on deep neural network technology for detailed person appearance attributes allowing advanced forensic search.

Order number **MVC-IVA-APC**

