

SN-IPV7281HCAS-B

8MP AI-ISP Smart Dual Illumination Turret Network Camera



Key Features

- 1/1.8" progressive scan CMOS, up to 8MP (3840 × 2160) @ 25/30 fps
- Supports face, human, and vehicle detection with snapshot capture
- Supports human and vehicle attribute analysis
- Intelligent analytics: Intrusion, smart motion detection, single/double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, running detection, fall detection, fight detection, and people counting
- AI-ISP image enhancement and True WDR (120 dB)
- Built-in IR and warm light illumination up to 30 m
- Built-in microphone, 1/1 audio I/O, and 1/1 alarm I/O
- Built-in microSD card slot supporting up to 1 TB
- IP67-rated housing

Specifications

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max. Resolution	8 MP (3840 × 2160)
Shutter Speed	1/5 to 1/20,000s
Min. Illumination	Color: 0.0005 Lux @ (F1.0, AGC ON), 0 Lux with illuminator on
Day & Night	Auto (ICR)
Angle Adjustment	Pan: 0° to 355°, Tilt: 0° to 80°, Rotation: 0° to 360°
Lens	
Lens Type	Fixed lens
Focal Length	2.8 mm
Max. Aperture	F1.0
Field of View (FOV)	H: 109.4°, V: 59.5°
Iris	Fixed Iris
Illuminator	
Illuminator Type	IR, Warm light
IR wavelength	850 nm
Illumination Distance	IR distance up to 30 m (98.4 ft) Warm light distance up to 20 m (65.6 ft)
Illuminator Control	IR mode, White mode, Intelligent mode, None
Intelligent Analytics	
AI Multi-Target Detection	- Supports face, human, and vehicle detection with snapshot capture - Supports human and vehicle attribute analysis
Attribute Analysis	Human Attributes: Gender, age, glasses, hat, bag, upper clothing color & style, lower clothing color & style, reflective vest. Vehicle Attributes: Type, color, brand, orientation.
Intelligent Analysis	Intrusion detection, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, illegal parking, area people limit, perimeter detection, running detection, fall detection, and fight detection. - Supports alarm triggering based on specified target types (human/vehicle)
People Counting	Supported
Video & Audio	
Number of Streams	3 Streams
Resolution	Stream 1: 3840 × 2160, 2688 × 1520, 2560 × 1440, 2304 × 1296, 1920 × 1080, 1280 × 720 Stream 2: 1920 × 1080, D1, VGA, CIF Stream 3: VGA, CIF, QVGA

Frame Rate	Up to 25/30 fps
Bit Rate Control	CBR/VBR
Bit Rate	Stream 1: 200 Kbps to 16 Mbps Stream 2: 100 Kbps to 12 Mbps Stream 3: 100 Kbps to 3 Mbps
Smart Encoding	Supported
Region of Interest (ROI)	Up to 8 zones
Audio Compression	G.711 A-law, G.711 μ -law, RAW_PCM
Audio Bit Rate	64 Kbps (G.711), 128 Kbps (RAW_PCM)

Image

Image Adjustment	Brightness, Sharpness, Contrast, Saturation adjustable
Scene Mode	Indoor, Outdoor, Mirror, Corridor mode
Exposure Mode	Auto, Manual, Shutter priority
White Balance	Auto, Tungsten, Fluorescent, Daylight, Shadow, Manual
Day/Night Setting	Auto, Day mode, Night mode, Timer
Noise Reduction	2D/3D DNR
Image Enhancement	WDR, HLC, BLC, Defog
Wide Dynamic Range	True WDR (120 dB)
Privacy Masking	Up to 4 configurable zones

Event

Alarm Triggers	IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Day/Night switch alarm, Abnormal sound detection
Event Actions	Alarm record, FTP upload, Email notification, Snapshot, Alarm output, Audible alarm output, White light alarm output

Network

Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTP/RTCP, TCP/UDP, NTP, ARP, UPnP, FTP, SMTP, QoS, ICMP, IGMP, SMTP, 802.1x, SNMP, Multicast
Application Programming Interface	ONVIF (Profile S/T/G/M), SDK, CGI
Max Concurrent Streams	10 channels
User/Host Level	32+ users, 3 levels: Administrator, Operator, and Media user
Web Viewer	Chrome, Firefox, Microsoft Edge, IE11 or earlier

Security

OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
User Authentication	Digest authentication, Brute-force attack protection
Network Authentication	IEEE 802.1X (EAP-TLS)
Secure Communication	HTTPS, WSS (WebSocket Secure), SRTP
Access Control	IP-based access control, Auto logout

Data Protect	Encryption credentials
Audit	Access, system, and event logs
Secure Storage	AES-256 encrypted SD card storage
Supply Chain Security	SBOM

Interface

Network Interface	1 × RJ45 10/100 Mbps Ethernet port
Built-in Microphone	Supported
Audio Interface	1 input (3.5 mm), 1 output (3.5 mm)
Alarm Interface	1 input, 1 output
SD Card Slot	Built-in microSD card slot (up to 1 TB)
Reset Button	Supported

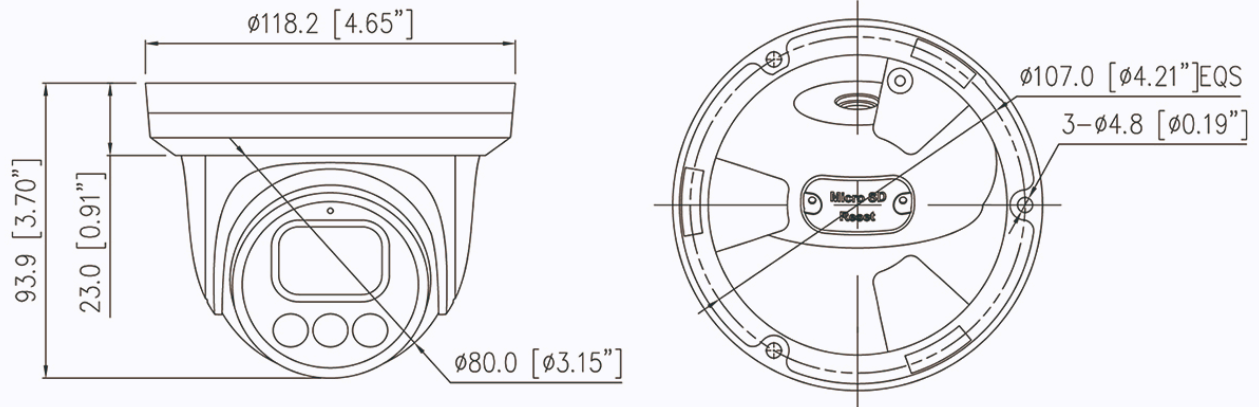
General

Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	12 VDC (-10% to +25%) / PoE (802.3af)
Power Consumption	Typical: 3.3 W (12 VDC) / approx. 4.2 W (PoE) Max (IR on): 5.8 W (12 VDC) / approx. 7.3 W (PoE)
Operating Temperature	-30 °C to 60 °C (-22 °F to 140 °F)
Operating Humidity	≤ 95% RH (Non-condensing)
Ingress Protection	IP67 (housing)
Certifications	CE-EMC: EN 55032, EN IEC 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 FCC 47 CFR Part 15 Subpart B
Material	Aluminum alloy housing; PC components
Dimensions	φ118.2 × 93.9 mm (4.65 × 3.7 inch)
Net Weight	Approx. 0.54 kg (1.19 lb)

DORI Distance (EN 62676-4 standard)

Detect	80.4 m (263.8 ft)
Observe	32.2 m (105.6 ft)
Recognize	16.1 m (52.8 ft)
Identify	8.0 m (26.3 ft)

Dimensions (mm)



Accessories

Optional:



SN-CBK646M
Junction Box



SN-BK382A
Wall Mount Bracket



SN-CBK203
Pendant Cap



SN-CBK402
Ceiling Mount Bracket



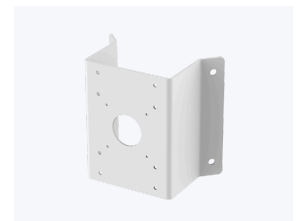
SN-CBK501
Wall Mount Bracket



SN-CBK502
Wall Mount Bracket



SN-CBK101
Pole Mount Bracket



SN-CBK102
Corner Mount Bracket