

SN-IPC8290WAN-CZ-T

9MP ANPR Box Network Camera



Key Features

- 1/1" GMOS sensor, up to 9 MP (4096 × 2160) @ 50/60 fps
- 10–40 mm motorized focus lens
- Supports license plate recognition and vehicle attribute analysis
- License plate recognition up to 200 km/h
- Supports up to 20,000 whitelist/blacklist entries and 20,000 captured snapshots
- 2 RJ45, 4/2 alarm I/O, 3 RS-485, 1 RS-232, and 1 USB
- Built-in microSD card slot (up to 1 TB)
- Hardware Root of Trust with FIPS 140-3 Level 3 validated secure element
- Supports 12 VDC / 24 VAC / PoE power supply

Specifications

Camera	
Image Sensor	1/1" GMOS
Max. Resolution	9 MP (4096 × 2160)
Shutter Speed	1/5 to 1/100,000 s
Min. Illumination	Color: 0.001 Lux @ (F1.4, AGC ON), B/W: 0.0005 Lux @ (F1.4, AGC ON)
Day & Night	Auto (ICR)
S/N Ratio	55 dB
Lens	
Lens Type	Varifocal lens
Focal Length	10–40 mm
Max. Aperture	F1.8
Field of View (FOV)	H: 63.8°–24.3°, V: 33.4°–12.6°
Iris	Fixed Iris
Focus Control	Motorized focus
Road Traffic and Vehicle Detection	
Coverage	Up to 2 lanes
Smart Function	License plate recognition (LPR); Vehicle attribute analysis (type, color, direction)
Vehicle Type	Car, SUV, Van, Minivan, Pickup, Bus, Truck, MPV, Sports Car
Vehicle Color	Blue, Yellow, Black, White, Green, Red, Gray, Brown, Gold, Orange
Vehicle Direction	Front-facing, Rear-facing
Vehicle Speed	Up to 200 km/h
LPR Region Support	Europe, USA, Brazil, Philippines, Israel, China, Australia, Chile, Indonesia, Malaysia, Oman, Saudi Arabia, South Africa
White/Black List	Up to 20,000 records
EMMC Storage	Up to 20,000 records
LPR Smart Search	Supported
Intelligent Analytics	
Intelligent Analysis	Intrusion, smart motion detection, single-line crossing, double-line crossing, wrong-way detection, and illegal parking - Supports alarm triggering based on specified target type (vehicle)
Video & Audio	
Number of Streams	3 Streams

Resolution	Stream 1: 4096 × 2160, 2592 × 1944, 2592 × 1520, 2560 × 1440, 2304 × 1296, 1920 × 1080, 1280 × 720 Stream 2: D1, VGA, CIF Stream 3: VGA, CIF, QVGA
Frame Rate	Up to 50/60 fps
Bit Rate Control	CBR/VBR
Bit Rate	Stream 1: 200 Kbps to 36 Mbps Stream 2: 100 Kbps to 6 Mbps Stream 3: 100 Kbps to 3 Mbps
Smart Encoding	Supported
Region of Interest (ROI)	Up to 8 zones

Image

Image Adjustment	Brightness, Sharpness, Contrast, Saturation
Scene Mode	Indoor, Outdoor, LPR, 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	DWDR
Privacy Masking	Up to 4 configurable zones

Event

Alarm Triggers	IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Day/Night switch alarm
Event Actions	Alarm record, FTP upload, Email notification, Alarm output, Wiegand 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
Hardware Security	FIPS 140-3 Level 3 validated secure element

Interface

Network Interface	2 × RJ45 10/100/1000 Mbps Ethernet ports
Alarm Interface	4 inputs, 2 outputs
USB Interface	1 × USB 2.0
RS-232	1 × RS-232
RS-485	3 × RS-485
Wiegand Port	1 × Wiegand (26-bit, SHA-1 26-bit, 34-bit, and NEWG 72-bit)
CVBS Output	1 × BNC
SD Card Slot	Built-in microSD card slot (up to 1 TB)
Reset Button	Supported

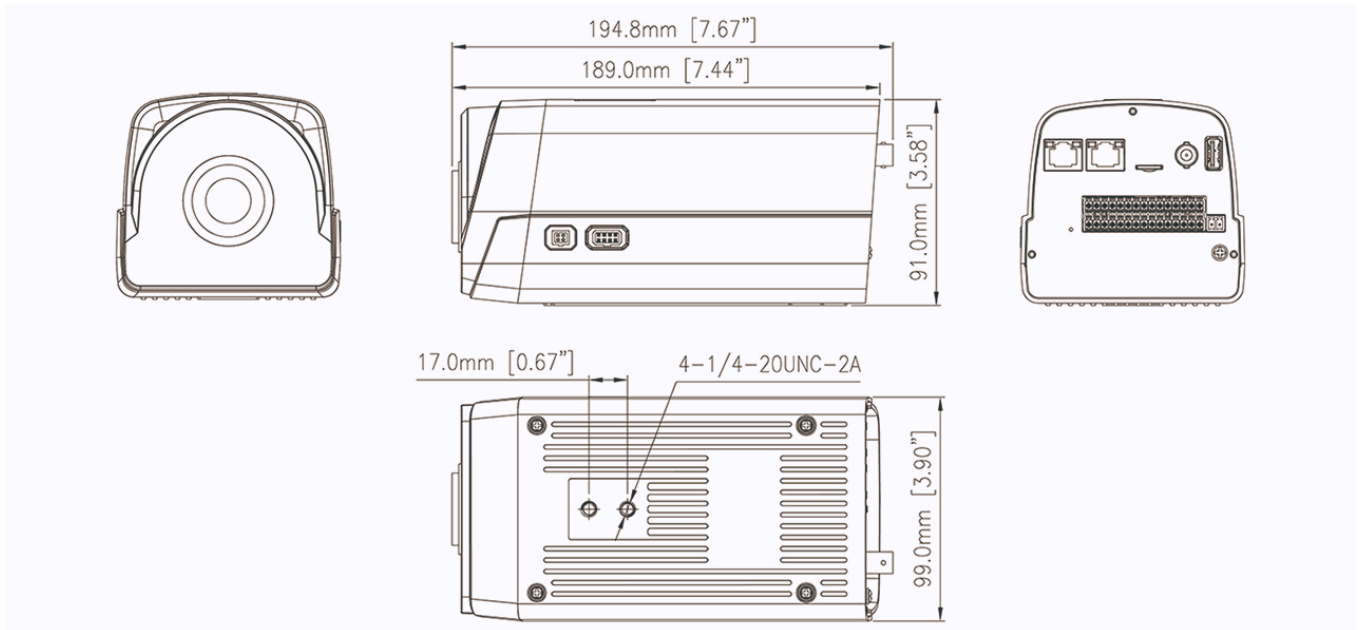
General

Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	12 VDC / 24 VAC / PoE+ (802.3at)
Power Consumption	Max. 10 W (12 VDC) / approx. 12 W (PoE)
Operating Temperature	-30 °C to 55 °C (-22 °F to 131 °F)
Operating Humidity	< 90% RH, non-condensing
Ingress Protection	N/A
Certifications	CE/FCC
Material	Aluminum alloy
Dimensions	194.8 × 99 × 91 mm (7.67 × 3.9 × 3.58 inch) without lens
Net Weight	Approx. 990 g (without lens)

DORI Distance (EN 62676-4 standard)

Detect	148–402 m (485.56–1318.9 ft)
Observe	59.2–160.8 m (194.23–527.56 ft)
Recognize	29.6–80.4 m (97.11–263.78 ft)
Identify	14.8–40.2 m (48.56–131.89 ft)

Dimensions (mm)



Accessories

Optional:



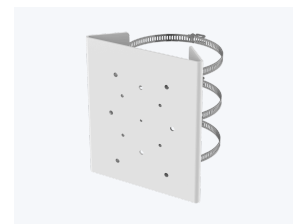
SN-CH0010
Housing



SN-CBK905
Universal Joint Bracket



SN-CBK508
Wall Mount Bracket



SN-CBK105
Pole Mount Bracket



SN-SMWR05S
Multi-Lane Traffic Speed Radar