SN-MV1090WAN-CZ

9MP Machine Vision Network Camera



Key Features

- 1/1" GMOS sensor, up to 9 MP (4096 × 2160) @ 50/60 fps
- 10–40 mm motorized focus lens
- Supports face, human and vehicle detection with snapshot capture
- Supports human and vehicle attribute analysis
- Intelligent analytics: Intrusion, smart motion detection, line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, running detection, fall detection, fight detection, and people counting
- 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 Certified Secure Element
- Supports 12 VDC / 24 VAC / PoE power supply

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Specifications

Camera	
Image Sensor	1/1" GMOS
Max. Resolution	9MP (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
Intelligent Analytics	
AI Multi-Target Detection	- Supports face, human, and vehicle detection with snapshot capture - Supports human and vehicle attribute analysis - Supports tracking display modes: Full Frame, Four-Corner Frame, and Mosaic
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, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, 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: 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

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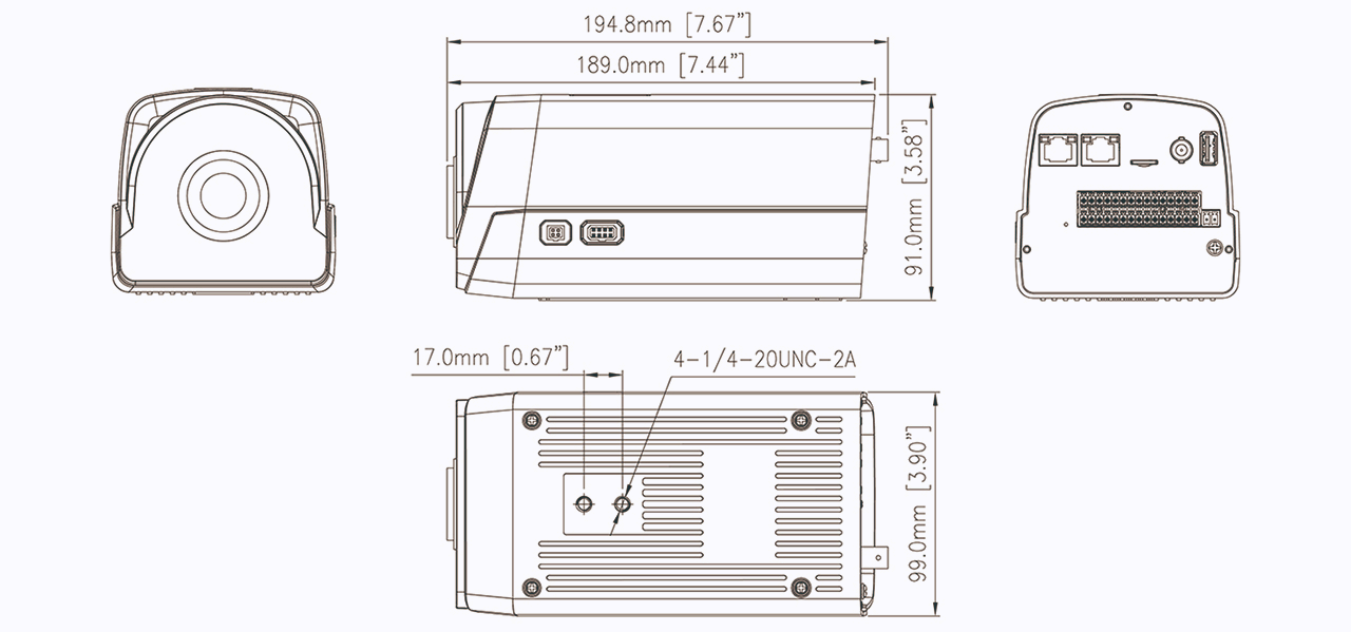
Smart Encoding	Supported
Region of Interest (ROI)	Up to 8 zones
Image	
Image Adjustment	Brightness, Sharpness, Contrast, Saturation
Scene Mode	Indoor, Outdoor, Mirror, Corridor mode
Exposure Mode	Auto, Manual, Shutter priority
White Balance	Auto, Tungsten, Fluorescent, Daylight, Shadow, Manual
Day/Night Setting	Auto, Day mode, Night mode, Timer
Noise Reduction	2D/3D DNR
Image Enhancement	WDR, HLC, BLC, Defog
Wide Dynamic Range	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, Snapshot, Alarm output, Wiegand output
Network	
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTCP/RTP, 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 Certified Secure Element
Interface	
Network Interface	2 × RJ45 10/100/1000 Mbps Ethernet ports

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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 ℃ to 55 ℃ (-22 ℉ to 131 ℉)
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)

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Dimensions (mm)



Accessories

Optional:



SN-CH0010

Housing



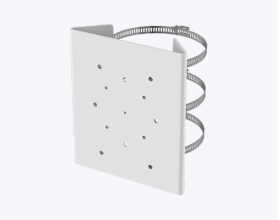
SN-CBK905

Universal Joint Bracket



SN-CBK508

Wall Mount Bracket



SN-CBK105

Pole Mount Bracket

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