

SN-IPR8020CBAN-Z

2MP IR Varifocal Bullet Network Camera



Key Features

- 1/2.8" STARVIS™ CMOS
- Max. 2MP(1920×1080) @25/30fps resolution
- 2.7 to 13.5 mm motorized focal lens
- Supports face, human, and vehicle detection & capture.
- Intelligent analytics: Intrusion, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, and people counting.
- True WDR (120dB), 3D DNR, ROI, Defog, HLC
- Smart IR distance up to 50 m
- Built-in mic and speaker, 1/1 audio input/output, 1/1 alarm input/output
- Built-in microSD card slot
- IP66 protection

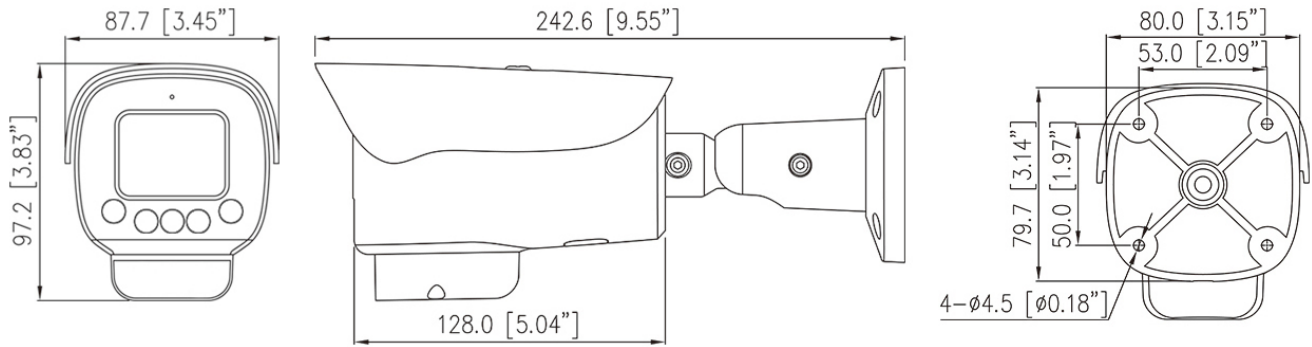
Specifications

Camera	
Image Sensor	1/2.8" Progressive Scan CMOS
Max Resolution	2MP, 1920(H) × 1080(V)
Shutter Speed	1/5 to 1/20,000s
Min Illumination	Color: 0.01 Lux @ (F1.6, AGC ON), B/W: 0.005 Lux @ (F1.6, AGC ON), 0 Lux with IR on
Day & Night	Auto (ICR)
Angle Adjustment	Pan: 0° to 360°, Tilt: 0° to 90°, Rotation: 0° to 360°
Lens	
Lens Type	Varifocal lens, Motorized focal
Focal Length	2.7 to 13.5 mm
Max. Aperture	F1.6
Field of View (FOV)	H: 101° to 28°, V: 54° to 16°
Iris	Fixed Iris
Illuminator	
Type	IR
IR wavelength	850 nm
Distance	Up to 50 m (164.0 ft)
Control	Auto/Manual
Intelligent Analytics	
AI Multi-Target	- Supports face, human, and vehicle detection & capture. - Supports multiple frame modes: Full Frame, Four-Corner Frame, Mosaic.
Intelligent Analysis	Intrusion detection, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection. - Supports accurate target classification (human/vehicle)
People Counting	Supported
Video & Audio	
Number of Streams	3 Streams
Resolution	Stream1: 1920×1080, 1280×720 Stream2: D1, VGA, 640×360, CIF, QVGA Stream3: VGA, CIF, QVGA
Frame Rate	Up to 25/30fps
Bit Rate Control	CBR/VBR

Bit Rate	Stream1: 200 Kbps to 12 Mbps Stream2: 100 Kbps to 6 Mbps Stream3: 100 Kbps to 3 Mbps
Smart Encoding	Supported
Region of Interest (ROI)	Off/On (8 Zone, Rectangle)
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, Night, Timer
Noise Reduction	2D/3D DNR
Image Enhancement	HLC, BLC, Defog, WDR
Wide Dynamic Range	True WDR (120dB)
Privacy Masking	4 areas
Event	
Alarm Triggers	IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Day/Night switch alarm, Abnormal sound detection
Event Actions	Alarm record, Alarm output, FTP upload, SMTP upload, Snapshot, Audible 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, Media user
Web Viewer	<IE11, Chrome, Firefox, Microsoft Edge
Security	
OS / Firmware Protect	Encrypted firmware, Signed firmware
User Authentication	Digest authentication, Prevent brute-force attack
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 / Event Log management
Secure Storage	SDcard partition encrypt (AES-256), Secure element

Supply Chain Security	SBOM
Interface	
Network Interface	1 × Ethernet (10/100 Base-T), RJ-45 connector
Built-in Microphone	Supported
Built-in Speaker	Supported
Audio Interface	1ch Input, 1ch Output
Alarm Interface	1ch Input, 1ch Output
SD Card Slot	Built-in microSD card slot, up to 256GB
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	Basic: Max 3 W (without light) Max. (Focus + WDR + Speaker + IR on): 10.5 W
Operating Temperature	-40°C to 55°C (-40°F to 131°F)
Operating Humidity	Less than 95% RH
Ingress Protection	IP66
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 + plastic
Dimensions	242.6 × 87.7 × 97.2 mm (9.55 × 3.45 × 3.83 inch)
Net Weight	Approx. 920 g (2.03 lb)
DORI Distance (EN62676-4 standard)	
Detect	48 to 152 m (157.5 to 498.7 ft)
Observe	19.2 to 60.8 m (63 to 199.5 ft)
Recognize	9.6 to 30.4 m (31.5 to 99.7 ft)
Identify	4.8 to 15.2 m (15.7 to 49.9 ft)

Dimensions (mm)



Accessories

Optional:



SN-CBK656A
Junction Box



SN-CBK627D
Pole Mount