SN-IPR8020CBAS-B

2MP Smart Dual Illumination Bullet Network Camera

Key Features

- 1/2.8" STARVIS™ CMOS

- Max. 2MP(1920×1080) @25/30fps resolution

- 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

- Built-in IR LED and warm lights, illumination distance up to 40m

- Built-in mic and speaker, 1/1 audio input/output, 1/1 alarm input/output

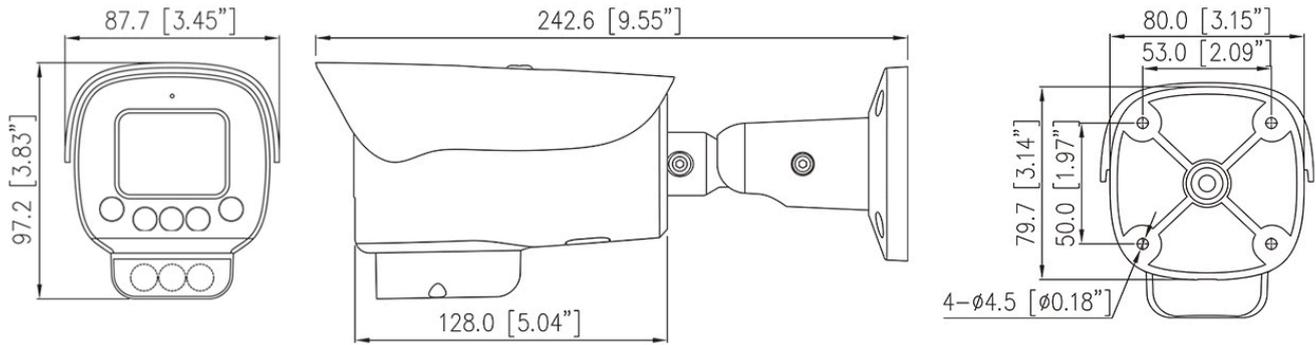- Built-in microSD card slot

- 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	Fixed lens, fixed focal
Focal Length	4 mm
Max. Aperture	F1.6
Field of View (FOV)	H: 80.3°, V: 41°
Iris	Fixed Iris

Illuminator

Type	IR, Warm light
IR wavelength	850 nm
Distance	IR distance up to 40m (131.2 ft) Warm distance up to 30m (98.4 ft)
Control	IR mode, White mode, Intelligent mode, None

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, White light alarm 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, 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	Max 9.5 W
Operating Temperature	-40℃ to 55℃ (-40℉ to 131℉)
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. 900 g (1.98 lb)

DORI Distance (EN62676-4 standard)

Detect	56.5 m (185.4 ft)
Observe	22.6 m (74.1 ft)
Recognize	11.3 m (37.1 ft)
Identify	5.65 m (18.5 ft)

Dimensions (mm)

87.7 [3.45"]

97.2 [3.83"]

242.6 [9.55"]

128.0 [5.04"]

80.0 [3.15"]

53.0 [2.09"]

79.7 [3.14"]

50.0 [1.97"]

4-Ø4.5 [Ø0.18"]

Accessories

Optional:

SN-CBK656A Junction Box	SN-CBK627D Pole Mount