SN-IPR8052BYAN-B

5MP IR Fixed Bullet Network Camera



Key Features

- 1/2.8” STARVIS™ CMOS, up to 5MP (2592 × 1944) @ 25/30 fps
- 2.8 mm / 4 mm fixed lens optional
- Supports face, human, and vehicle detection with snapshot capture
- Intelligent analytics: Intrusion, smart motion detection, single/double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, and people counting.
- Supports AV1 video compression
- True WDR (120 dB), 3D DNR, ROI, Defog, HLC
- Smart IR illumination up to 40 m
- 1/1 audio input/output, 1/1 alarm input/output
- Built-in microSD card slot (up to 1 TB)
- Hardware Root of Trust with FIPS 140-3 Level 3 validated secure element
- IP67-rated housing

Product specifications are subject to change without prior notice. For the latest Sunell product information, please visit www.sunellsecurity.com.
© 2026 Shenzhen Sunell Technology Corporation. All rights reserved.

Specifications

Camera	
Image Sensor	1/2.8” Progressive Scan CMOS
Max. Resolution	5MP (2592 × 1944)
Shutter Speed	1/5 to 1/20,000s
Min. Illumination	Color: 0.005 lux @ (F1.6, AGC ON); B/W: 0.001 lux @ (F1.6, AGC ON); 0 lux with IR on
Day & Night	Auto (ICR)
S/N Ratio	55 dB
Angle Adjustment	Pan: 0˚ to 360˚, Tilt: 0˚ to 90˚, Rotation: 0˚ to 360˚
Lens	
Lens Type	Fixed lens
Focal Length	2.8 mm / 4 mm (Optional)
Max. Aperture	F1.6
Field of View (FOV)	2.8 mm: H 97.5°, V 71.6° 4 mm: H 80.5°, V 56.8°
Iris	Fixed Iris
Focus Control	Fixed
Illuminator	
Illuminator Type	IR
IR wavelength	850 nm
Illumination Distance	Up to 40 m (131.2 ft)
Illuminator Control	Auto / Manual
Intelligent Analytics	
AI Multi-Target Detection	Supports face, human, and vehicle detection with snapshot capture
Intelligent Analysis	Intrusion detection, smart motion detection, single line crossing, double line crossing, loitering, wrong-way detection, illegal parking, area people limit, and perimeter detection.. - Supports alarm triggering based on specified target types (human/vehicle)
People Counting	Supported
Video & Audio	
Number of Streams	3 Streams
Resolution	Stream 1: 2592 × 1944, 2560 × 1440, 1920 × 1080, 1280 × 720 Stream 2: D1, VGA, CIF Stream 3: VGA, CIF, QVGA
Frame Rate	Up to 25/30 fps

Product specifications are subject to change without prior notice. For the latest Sunell product information, please visit www.sunellsecurity.com.
© 2026 Shenzhen Sunell Technology Corporation. All rights reserved.

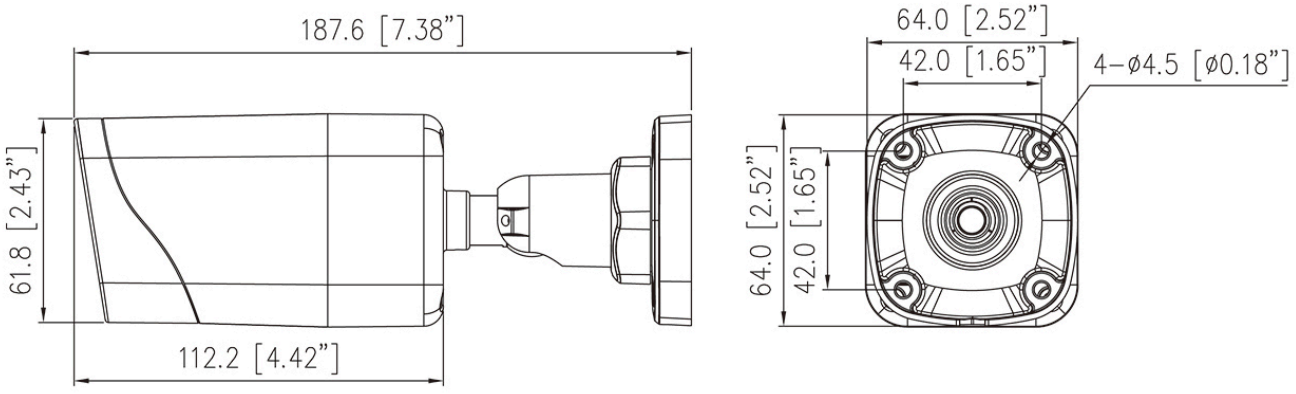
Bit Rate Control	CBR/VBR
Bit Rate	Stream 1: 200 Kbps to 12 Mbps Stream 2: 100 Kbps to 6 Mbps Stream 3: 100 Kbps to 3 Mbps
Smart Encoding	Supported
Region of Interest (ROI)	Up to 8 zones
Audio Compression	G.711 A-law, G.711 μ-law, RAW_PCM
Audio Bit Rate	64 Kbps (G.711), 128 Kbps (RAW_PCM)
Image	
Image Adjustment	Brightness, Sharpness, Contrast, Saturation
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, Alarm output, FTP upload, Email notification, Snapshot, Audible 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	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 log management

Product specifications are subject to change without prior notice. For the latest Sunell product information, please visit www.sunellsecurity.com.
© 2026 Shenzhen Sunell Technology Corporation. All rights reserved.

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	1 × RJ45 10/100 Mbps Ethernet port
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 (−15% to +25%) / PoE (IEEE 802.3af)
Power Consumption	12 VDC: Typical 2.1 W, Max. 5.7 W; PoE: Approx. 2.7 W (Typical), 7.2 W (Max.)
Operating Temperature	-35 ℃ to 60 ℃ (-31 ℉ to 140 ℉)
Operating Humidity	≤ 95% RH (Non-condensing)
Ingress Protection	IP67 (housing)
Certifications	CE-EMC: EN 55032, EN IEC 61000-6-4, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, EN 50130-4 FCC: 47 CFR Part 15 Subpart B
Material	Aluminum alloy
Dimensions	187.6 × 64 × 64 mm (7.39 × 2.52 × 2.52 inch)
Net Weight	Approx. 625 g (1.38 lb)
DORI Distance (EN 62676-4 standard)	
Detect	2.8 mm: 62 m (203.4 ft); 4 mm: 84 m (275.6 ft)
Observe	2.8 mm: 24.8 m (81.4 ft); 4 mm: 33.6 m (110.2 ft)
Recognize	2.8 mm: 12.4 m (40.7 ft); 4 mm: 16.8 m (55.1 ft)
Identify	2.8 mm: 6.2 m (20.3 ft); 4 mm: 8.4 m (27.6 ft)

Product specifications are subject to change without prior notice. For the latest Sunell product information, please visit www.sunellsecurity.com.
© 2026 Shenzhen Sunell Technology Corporation. All rights reserved.

Dimensions (mm)



Accessories

Optional:



SN-CBK656A

Junction Box



SN-CBK627D

Pole Mount Bracket

Product specifications are subject to change without prior notice. For the latest Sunell product information, please visit www.sunellsecurity.com.
© 2026 Shenzhen Sunell Technology Corporation. All rights reserved.