

# IK-B4857FR-Z

4MP IR Varifocal Bullet Network Camera



## Key Features

- 1/2.8" STARVIS™ CMOS
- Max. 4MP (2592×1520) @50/60fps resolution
- 2.7 to 13.5 mm, 5 to 50 mm motorized focal lens
- Supports face, human, and vehicle detection & capture.
- Supports human and vehicle attribute detection.
- Intelligent analytics: 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, fight detection, and people counting.
- True WDR (120dB), 3D DNR, ROI, Defog, HLC
- Smart IR distance up to 100 m
- Built-in microphone, 1/1 audio input/output, 1/1 alarm input/output
- Built-in microSD card slot (up to 1 TB)
- IP66 protection

## Specifications

Camera	
Image Sensor	1/2.8" Progressive Scan CMOS
Max Resolution	4MP, 2592(H) × 1520(V)
Shutter Speed	1/5 to 1/100,000s
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, 5 to 50 mm optional
Max. Aperture	F1.6 / F2.0
Field of View (FOV)	2.7 to 13.5 mm: - H: 98.4° to 28.1°, V: 55.1° to 16.6° 5 to 50 mm: - H: 46.8° to 7.7°, V: 34.5° to 5.8°
Iris	Fixed Iris
Illuminator	
Type	IR
IR wavelength	850 nm
Distance	2.7 to 13.5 mm: - Up to 60 m (196.9 ft) 5 to 50 mm: - Up to 100 m (328.1 ft)
Control	Auto/Manual
Intelligent Analytics	
AI Multi-Target	- Supports face, human, and vehicle detection & capture. - Supports human and vehicle attribute detection. - Supports multiple frame modes: Full Frame, Four-Corner Frame, Mosaic.
Attribute Extraction	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, fight detection, and people counting. - Supports accurate target classification (human/vehicle)
People Counting	Supported

Video & Audio	
Number of Streams	3 Streams
Resolution	Stream1: 2592×1520, 2560×1440, 2304×1296, 1920×1080, 1280×720 Stream2: D1, VGA, 640×360, CIF, QVGA Stream3: VGA, CIF, QVGA
Frame Rate	Up to 50/60fps
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/ 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
Audio Interface	1ch Input, 1ch Output
Alarm Interface	1ch Input, 1ch Output
SD Card Slot	Built-in microSD card slot, up to 1 TB
Reset Button	Supported

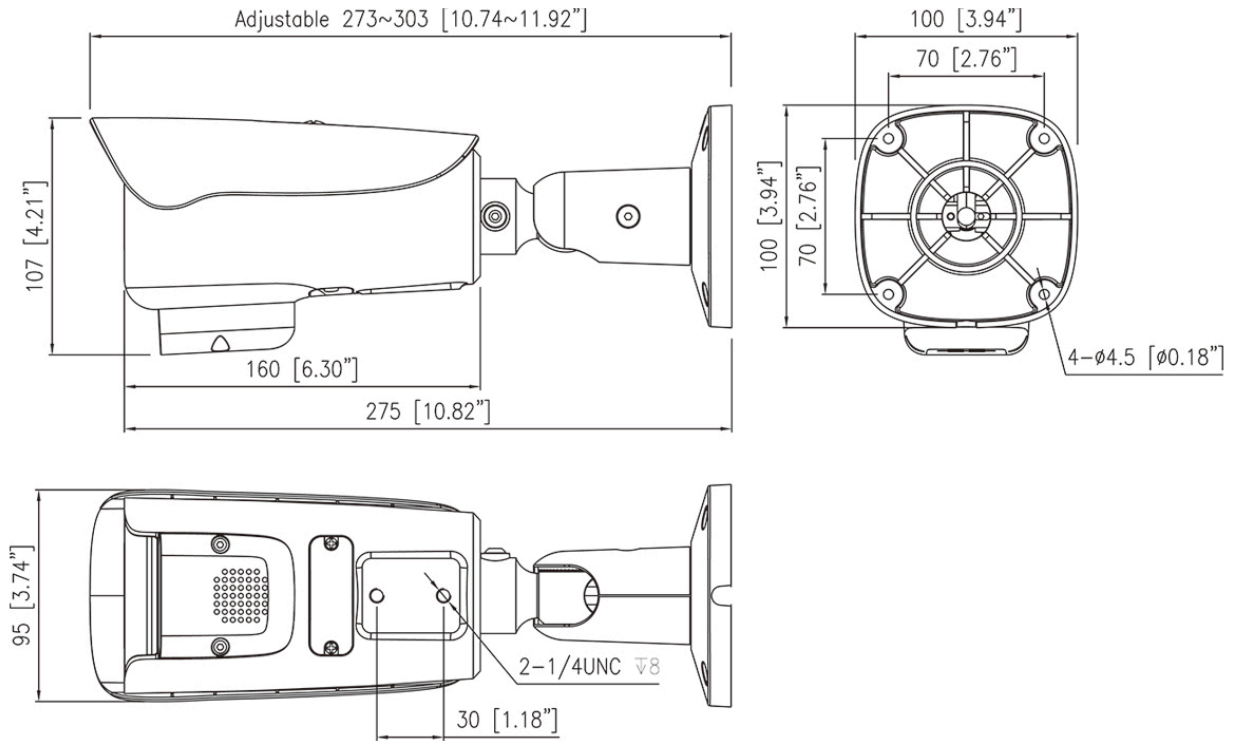
### General

Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	12 VDC (-10% to +25%) / PoE (802.3af)
Power Consumption	Max 11.5W
Operating Temperature	-40°C to 60°C (-40°F to 140°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	303 × 100 × 107 mm (11.9 × 3.94 × 4.21 inch)
Net Weight	Approx. 1.25 kg (2.76 lb)

### DORI Distance (EN62676-4 standard)

Detect	2.7 to 13.5 mm: 72 to 220 m (236.2 to 721.8 ft) 5 to 50 mm: 140 to 840 m (459.3 to 2755.9 ft)
Observe	2.7 to 13.5 mm: 28.8 to 88 m (94.5 to 288.7 ft) 5 to 50 mm: 56 to 336 m (183.7 to 1102.4 ft)
Recognize	2.7 to 13.5 mm: 14.4 to 44 m (47.2 to 144.4 ft) 5 to 50 mm: 28 to 168 m (91.9 to 551.2 ft)
Identify	2.7 to 13.5 mm: 7.2 to 22 m (23.6 to 72.2 ft) 5 to 50 mm: 14 to 84 m (45.9 to 275.6 ft)

## Dimensions (mm)



## Accessories

### Optional:



IK-AJ45G  
Junction Box



IK-AP27D  
Pole Mount



IK-AP01A  
Pole Mount



IK-ACR02A  
Corner Mount