

IK-T8A416FW-B

4MP AI-ISP Full Color Turret Network Camera



Key Features

- 1/1.8" progressive scan CMOS, up to 4MP (2688 × 1520) @ 25/30 fps
- Supports face, human, and vehicle detection with snapshot capture
- Supports human and vehicle attribute analysis
- Intelligent analytics: Intrusion, smart motion detection, single/double line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, running detection, fall detection, fight detection, and people counting
- AI-ISP image enhancement and True WDR (120dB)
- Built-in warm light illumination up to 40 m
- Built-in microphone and speaker for two-way audio
- Built-in microSD card slot supporting up to 1 TB
- Audio and alarm I/O interfaces
- Hardware Root of Trust with FIPS 140-3 Level 3 Certified Secure Element
- IP66-rated protection

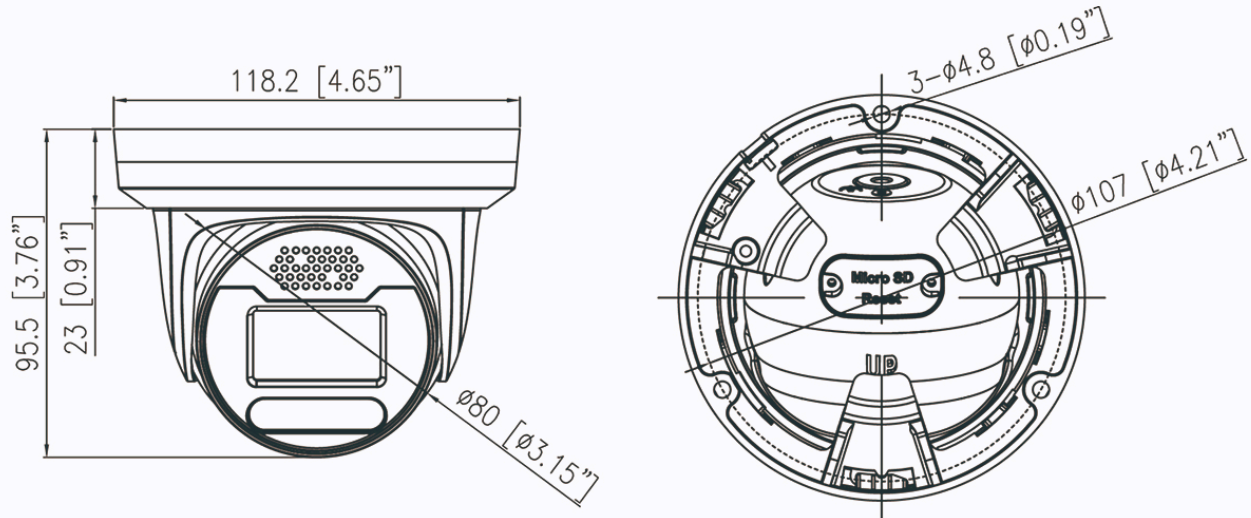
Specifications

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max. Resolution	4 MP (2688 × 1520)
Shutter Speed	1/5 to 1/20,000s
Min. Illumination	Color: 0.0001 Lux @ (F1.0, AGC ON), 0 Lux with illuminator on
Day & Night	Fixed IR-cut filter
Angle Adjustment	Pan: 0° to 337°, Tilt: 0° to 80°, Rotation: 0° to 360°
Lens	
Lens Type	Fixed focal lens
Focal Length	2.8 mm
Max. Aperture	F1.0
Field of View (FOV)	H: 111.9°, V: 61.2°
Iris	Fixed Iris
Illuminator	
Illuminator Type	Warm light
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 - 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: 2688 × 1520, 2560 × 1440, 2304 × 1296, 1920 × 1080, 1280 × 720 Stream 2: D1, VGA, CIF Stream 3: VGA, CIF, QVGA
Frame Rate	Up to 25/30 fps

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 output, Alarm record, FTP upload, Email Notification, Snapshot, Audible alarm output
Network	
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, RTSP/ RTPC/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 user 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 support
Hardware Security	FIPS 140-3 Level 3 Certified Secure Element
Interface	
Network Interface	1 × RJ45 10/100 Mbps Ethernet port
Built-in Microphone	Supported
Built-in Speaker	Supported
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 (802.3af)
Power Consumption	Typical: 3.7 W (12VDC); approx. 4.65 W (PoE) Max (with Warm Light + Speaker): 8.3 W (12 VDC); approx. 10.4 W (PoE)
Operating Temperature	-40 °C to 60 °C (-40 °F to 140 °F)
Operating Humidity	≤ 95% RH (Non-condensing)
Ingress Protection	IP66
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 housing; PC components
Dimensions	φ118.2 × 95.5 mm (φ4.65 × 3.76 inch)
Net Weight	Approx. 545 g (1.2 lb)
DORI Distance (EN 62676-4 standard)	
Detect	58 m (190.3 ft)
Observe	23.2 m (76.1ft)
Recognize	11.6 m (38.1 ft)
Identify	5.8 m (19.0 ft)

Dimensions (mm)



Accessories

Optional:



IK-AJ46M
Junction Box



IK-AW382A
Wall Mount Bracket



IK-ACC03
Pendant Cap



IK-AC02
Ceiling Mount Bracket



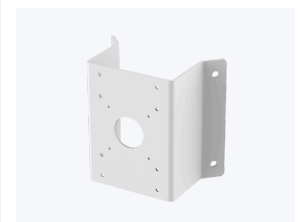
IK-AW01
Wall Mount Bracket



IK-AW02
Wall Mount Bracket



IK-AP01
Pole Mount Bracket



IK-ACR02
Corner Mount Bracket