

IK-EXP181840-R

8MP 40x Explosion-Proof IR Network PTZ Camera



Key Features

- 1/1.8" STARVIS™ CMOS, up to 8MP (3840 × 2160) @ 25/30 fps
- 40x optical zoom, 16x digital zoom
- Supports face, human, and vehicle detection with snapshot capture
- Supports human and vehicle attribute analysis
- Intelligent analytics: Intrusion, smart motion detection, line crossing, loitering, wrong-way detection, area people limit, perimeter detection, illegal parking, running detection, fall detection, fight detection, smoke and flame detection, and people counting.
- Supports alarm-linked tracking and intelligent human/vehicle tracking
- True WDR, 3D DNR, ICR, Defog, and EIS
- Smart IR illumination up to 250 m
- Material: 316L Stainless steel, IP68 water resistant, built-in wiper
- ATEX: II 2 G Ex db IIC T6 Gb, Ex II 2 D Ex tb IIIC T80°C Db

Specifications

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max Resolution	8MP (3840 × 2160)
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
Lens	
Focal Length	6.8–272 mm
Max. Aperture	F1.63–F4.94
Field of View (FOV)	H: 62.0°–2.4°, V: 36.6°–1.3°
Optical Zoom	40×
Digital Zoom	16×
Iris	Auto / Manual
Focus Control	Auto / Manual
Illuminator	
Type	IR
IR wavelength	850 nm
Distance	Up to 250 m (820.21 ft)
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 detection, 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. - Supports alarm triggering based on specified target types (human/vehicle)
Smoke and Flame Detection	Supported
People Counting	Supported
Video & Audio	

Number of Streams	3 Streams
Resolution	Stream 1: 3840 × 2160, 2592 × 1520, 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 16 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 adjustable
Scene Mode	Indoor, Outdoor, Mirror
Exposure Mode	Auto, Manual, Shutter priority, Iris 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	HLC, BLC, Defog, WDR, Anti-shake
Wide Dynamic Range	True WDR (120 dB)
Privacy Masking	Up to 40 zones

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: -90° to +90°
Pan Speed	Pan speed: 0.1° to 40°/s
Tilt Speed	Tilt speed: 0.1° to 40°/s
Preset Accuracy	≤0.3°
Preset	400
Track	6
Scan	12
Tour	12 (up to 32 presets per tour)
Intelligent Tracking	Human/Vehicle auto tracking
Power-Off Memory	Supported
3D Positioning	Supported
PTZ Status Display	Supported
Idle Motion	Automatically runs Preset, Tour, Scan, or Track after a configurable idle time (1–240 min)

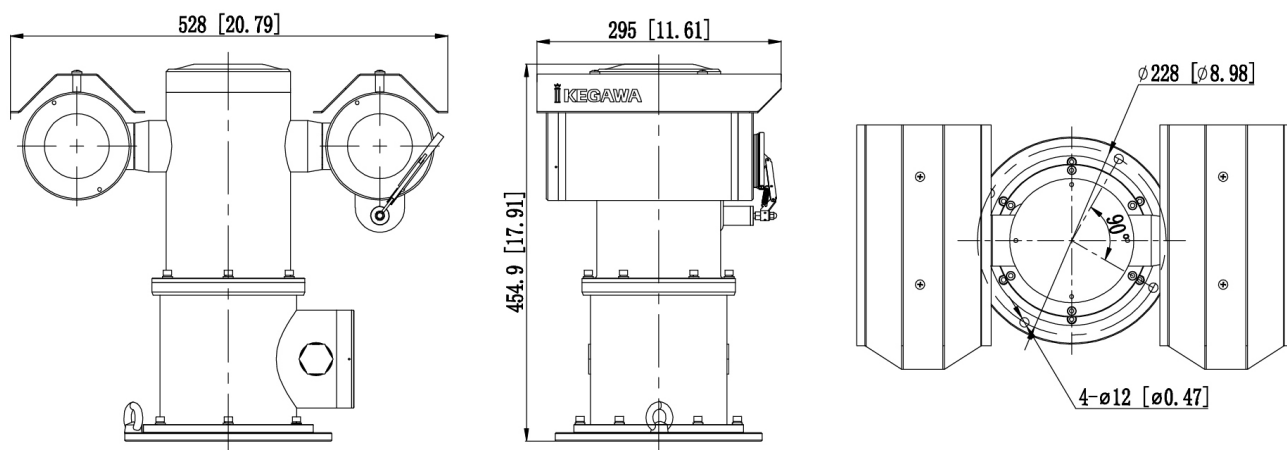
Event	
Alarm Triggers	IVS, Motion detection, Alarm input, Network alarm, Disk alarm, Day/Night switch alarm, Abnormal sound detection
Event Actions	Alarm record, FTP upload, Email notification, Snapshot, Alarm output, Audible alarm output
Network	
Protocols	IPv4/IPv6, HTTP/HTTPS, DNS, DDNS, DHCP, PPPoE, 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	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
Interface	
Network Interface	1 × RJ45 10/100 Mbps Ethernet port
Audio Interface	1 input, 1 output
Alarm Interface	5 inputs, 1 output
RS-485	1 × RS-485
CVBS Output	1 × BNC
SD Card Slot	Built-in microSD card slot (up to 1 TB) *Memory card must be factory pre-installed and is not field-installable.
Reset Button	Supported
General	
Language	English, Chinese, Traditional Chinese, Polish, Italian, Portuguese, Spanish, Russian, French, Czech, Hungarian, Japanese, Korean. Default: English
Power Supply	100–240 VAC
Power Consumption	≤ 60 W
Operating Temperature	–40 °C to 60 °C (–40 °F to 140 °F)

Operating Humidity	≤ 95% RH (Non-condensing)
Ingress Protection	IP68
Wiper	Supported
Cable Entry	M25 × 1.5
Certifications	ATEX: II 2GD Ex db IIC T6 Gb / Ex tb IIIC T80°C Db; IECEX: Ex db IIC T6 Gb / Ex tb IIIC T80°C Db
Material	SUS316L
Dimensions	528 × 295 × 454.9 mm (20.79 × 11.61 × 17.91 in)
Net Weight	Approx. 43.5 kg (95.9 lb)

DORI Distance (EN 62676-4 standard)

Detect	140–5,600 m (459.32–18,372.7 ft)
Observe	56–2,240 m (183.73–7,349.08 ft)
Recognize	28–1,120 m (91.86–3,674.54 ft)
Identify	14–560 m (45.93–1,837.27 ft)

Dimensions (mm)

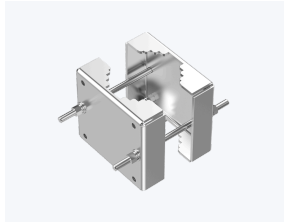


Accessories

Optional:



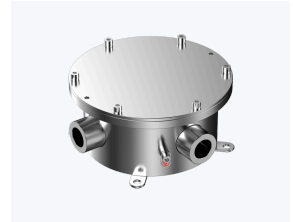
IK-AW402
Wall Mount Bracket



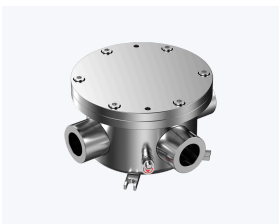
IK-AP404
Pole Mount Bracket



IK-ACR405
Corner Mount Bracket



IK-EXJ200(-F)
Explosion-proof Junction Box



IK-EXJ150(-N)
Explosion-proof Junction Box



IK-EXW10L
Washing Tank