

EX-CA-AI series

Explosion Proof 4MP Multi-Algorithm Box Camera
Inside Camera—M1221-Q



II 2G Ex db IIC T6



Ex d IIC T6



INSIDE
M1221-Q by default



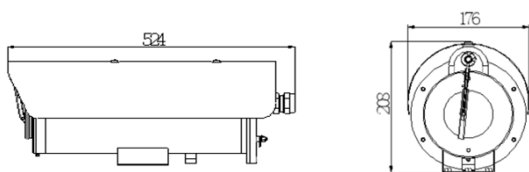
Features

- 1/1.8" progressive scan CMOS
- Detection and capture of faces, persons, and vehicles in scenes with mixed objects
- Intelligent object detection algorithms based on deep learning. The camera can detect up to 50 objects at a time
- Facial attribute recognition and personal attribute recognition
- Area cropping, allowing users to view fine details at a limited bandwidth
- Stream smoothing, meeting various requirements for video quality and fluency
- Traffic shaping, enabling precise control over instantaneous burst of video streams and delivering smooth video without packet loss
- TCP acceleration, enabling the network to carry video streams of higher quality
- PoE or AC/DC power supplies
- Stainless steel 304 or 316L enclosure
- Weather Proof IP68(1.2m/45min)
- IECEx and ATEX Zone 1 and Zone 2 certification
- ATEX Certificate no.: Presafe 19 ATEX 08173X
- IECEx Certificate No.: IECEx PRE 19.0064X

Order Reference					
Stock code	Power supply	Window Wiper	Auto temperature adjust kit with defroster(optional)	Cooling fan	Weight
EX-CA-AI01A	100 ~ 240VAC±10% 50/60Hz (Standard) and 24VAC (Optional)	Yes	Yes,temperature: -40° C to +60° C	Yes	Net weight(without bracket): 16 Kg Net weight(with bracket): 20 Kg
EX-CA-AI02A	100 ~ 240VAC±10% 50/60Hz (Standard) and 24VAC (Optional)	No	Yes,temperature: -40° C to +60° C	Yes	Net weight(without bracket): 15 Kg Net weight(with bracket): 19 Kg
EX-CA-AI02B	PoE	No	No,temperature: -25° C to +60° C	No	Net weight(without bracket): 14.5 Kg Net weight(with bracket): 18.5 Kg

Dimensions

Unit: mm



Accessories



Wall-mount bracket
& Universal joint

Specifications

Model	EX-CA-AI series
Camera(M1221-Q)	
Image sensor	1/1.8" 2-megapixel progressive scan CMOS
Effective pixels	1920 x 1080
Minimum illumination	Color: 0.001 lux (F1.2, AGC ON, 1/30s shutter speed) B/W: 0.0001 lux (F1.2, AGC ON, 1/30s shutter speed)
Day/Night mode	Automatic ICR, color, or B/W
Shutter speed	1/68250s to 1/3s
Gain control	Auto/Manual
WDR	120 dB, physical WDR
Backlight compensation (BLC)	Supported (BLC area is selectable)
Highlight compensation (HLC)	Supported
Image defogging	Auto/Manual/Off
White balance	Auto tracking/Auto/Manual/
Digital noise reduction (DNR)	2D/3D noise reduction
Focus assistance	Supported
Lens	
Lens mount	CS-mount
Iris type	DC-Iris
PTZ	
Preset position	256
Functions	
Video encoding format	H.265/H.264/MJPEG
Maximum resolution	1920 x 1080
Frame rate	60 Hz: 1 fps to 60/30/20 fps; 50 Hz: 1 fps to 50/25/20 fps
Multi-Channel encoding	Supports five streams and dual-channel independent 1080p HD video encoding.
Area cropping encoding	4-channel encoding (secondary streams)
Intelligent encoding	Extra265/264
Audio encoding format	G.711a/G.711u/G.726/OPUS/ACC
Camera connection protocol	ONVIF Profile S/G/T, GB/T 28181-2011/2016, GA/T 1400-2017, and GB 35114-2017
Network protocol	TCP, UDP, IPv4, IPv6, DHCP, DHCPv6, DNS, ICMP, ICMPv6, IGMP, HTTPS, FTP, SFTP, RTP, RTSP, RTCP, SIP, ARP, SSL, NTP, SNMP, 802.1X, QoS, DDNS, SMTP, SSH, and TLS
Security mode	User name and password authentication, 802.1X, HTTPS digital certificate, and flood attack prevention
Network intrusion alarm	Brute force attack detection, unauthorized super user detection, and botnet detection
Media security	KMC key encryption, AES256-based stream encryption, and digital watermark
Alarm linkage	Alarm source: motion detection/lens blocking/Boolean value input/intelligent analysis alarms Linked action: Boolean value output/preset position/tour track/scan/SD card-based recording/SD card-based snapshot/email sending/pre-recording
Intelligent Analysis	
Behavior analysis	Fast movement detection, abandoned object detection, removed object detection, tripwire crossing detection, intrusion detection, area entry/exit detection, and loitering detection
Exception detection	Video quality diagnosis, audio existence detection, sudden volume increase or decrease detection, scene change detection, defocus detection, heat map and crowd gathering detection
Face and person	Face capture, facial attribute recognition, person detection and personal attribute recognition
Crowd Flow Analysis	Head counting, crowd flow statistics and queue length detection
Port	
Network port	One RJ45 10M/100M adaptive Ethernet port
Communication serial port	One RS-485 port
Alarm port	1 alarm input port and 1 alarm output port
Audio port	1 audio input port and 1 audio output port
Storage port	One microSDHC/microSDXC card slot, supporting a maximum capacity of 256 GB
General Specifications	
Power supply	AC100-240V or AC24V, PoE+ (IEEE 802.3at)
Power consumption	Max. power:15W/25W(with thermostat) Inside camera:Maximum: 9 W; Typical: 7.5 W
Operating temperature	-25°C ~ +60°C/-40°C ~ +60°C
Operating humidity	5% to 95% (non-condensing)
Surge protection level	4 kV
Weight	See the order reference
Dimensions	524mm×179mm×215mm