

EX-CA-AI01A

Explosion Proof 4K Face Capture Camera

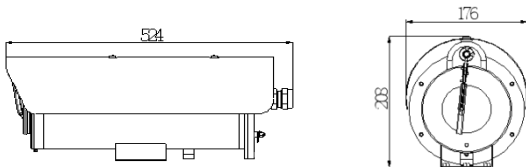


Features

- 1/1.8" progressive scan CMOS image sensor
- Built-in NPU neural network engine, greatly improving the performance of deep learning algorithms
- AI-based scene adaptation. The camera can detect scenarios in real time and make targeted setting optimization to improve imaging quality.
- Simultaneous snapshot of the face, person, and head and shoulder
- Simultaneous detection and tracking of 100 targets
- Minimum face size for face detection: 26 x 26 pixels
- Face capture supported for faces at an ultra-large deviation angle
- Face tracking, filtering, and evaluation to generate the optimal face snapshot and reduce repeated snapshots
- Facial attribute recognition and personal attribute recognition
- Software-defined camera, supporting online loading and upgrade of algorithms
- Extra265 intelligent encoding, reducing 70% of the requirements on storage and bandwidth resources
- Area cropping, viewing fine details through 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 and 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

Dimensions

Unit: mm



Optional Accessories



Wall-mount bracket & Universal joint

Specifications

Model	EX-CA-AI01A
Camera(X1281-F)	
Image sensor	1/1.8" 8.0-megapixel progressive scan CMOS
Effective pixels	3840 x 2160
Minimum illumination	Color: 0.01 lux @ (F1.2, AGC ON) B/W: 0.001 lux @ (F1.2, AGC ON)
Day/Night mode	Automatic ICR, color, or B/W
Shutter speed	1/3s to 1/68250s
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)	Self-adaptive to 2D or 3D DNR
Focus assistance	Supported
Lens	
Lens mount	C/CS-mount
Iris type	P-iris
Functions	
Video encoding format	H.265/H.264/MJPEG
Maximum resolution	3840 x 2160
Frame rate	30 fps, 25 fps, 1-20 fps
Video bit rate	32 kbit/s to 16 Mbit/s
Multi-stream encoding	Five streams, supporting 1080p encoding for secondary streams
Area cropping encoding	4-stream encoding (secondary streams)
Intelligent encoding	Extra265/Extra264, ROI, TCP intelligent acceleration, stream smoothing, and traffic shaping
Audio encoding format	G.711a/G.711u/G.726/OPUS
Voice communication	Voice intercom and broadcast, channel-associated voice
PU access protocol	ONVIF Profile S/G/T, GB/T 28181 (2011, 2016)
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, and HTTPS digital certificate
Media security	KMC key encryption, AES256-based stream encryption, and digital watermark
Alarm linkage	Alarm sources: motion detection alarms, lens blocking alarm, Boolean value input, intelligent analysis alarms Linked actions: Boolean value output, preset position, tour, scan, SD card recording, SD card snapshot, email sending, pre-recording
Intelligent functions	
Behavior analysis	Fast movement, abandoned object, removed object, tripwire crossing, intrusion, area enter/exit, loitering, and crowd gathering
Abnormality detection	Video quality diagnosis, audio detection, volume surge and decrease detection, scene change detection, and defocus detection
Intelligent analysis	
Pedestrian detection and capture	Simultaneous detection and optimal snapshot of face, head and shoulder, and person
Face exposure	Real-time exposure adjustment based on ambient light conditions, optimizing facial image quality
Facial attribute recognition	Five attributes, including whether the person wears a mask
Personal attribute recognition	Seven attributes, including the gender, age, and dressing style
Facial recognition and match(optional)	Facial recognition at the front end, supporting the alarm output based on the object match. This function is available after the corresponding license is purchased and can be upgraded online.
Camera Ports	
Network port	One RJ45 gigabit Ethernet port, supporting auto-sensing of 10 Mbit/s, 100 Mbit/s, and 1000 Mbit/s
Optical port	One SFP slot
Dual-Port Ethernet	Support with Ethernet port forwarding between Fiber optic and Copper ports
Communication serial port	One RS-485 port
Alarm port	1 alarm input port, 1 alarm output port
Audio port	1 audio input port, 1 audio output port
Storage port	One microSDHC/microSDXC card slot, max. 256 GB
General specifications	
Power supply	AC100-240V or AC24V, PoE+ (IEEE 802.3at)
Power consumption	Maximum: 9.5 W; typical: 6.1 W
Operating temperature	-25°C ~ +60°C / -40°C ~ +60°C
Operating humidity	5% to 95% (non-condensing)
Lightening protection level	6 kV
Weight (excluding lens)	17kg (without bracket), 21kg (with bracket)
Dimensions	524mm × 179mm × 215mm