

Thermal & Optical Bi-spectrum Network Bullet Camera

TIC2A32SA-F3-4F4AC-I1





Features

- Thermal & Deficial dual-spectrum image, dual video with single IP address, adaptable to more various scenes
- 1/2.8" target surface, high sensitivity sensor, satisfy the need of starlight monitoring
- Thermal module support reliable fire detection, smoking detection and fire shield area
- Thermal module supports temperature detection and cold&hot spot tracking which highlights the abnormal temperature, and link to alarm
- Thermal & Detical dual-spectrum smart intrusion prevention: cross line, enter area, leave area, intrusion
- Optical module supports smog recognition, which can help with fire alarm reconfirm
- Support picture-in-picture mode, real-time contrast live, more convenient and clear
- Support audio and light alarm, with red and blue warning lights built in
- Ultra 265, H.265, H.264, MJPEG
- Max 2688*1520@30fps in the optical module and Max 960P@30fps in the thermal module
- DC12V±25% or PoE power supply
- Alarm 2 in and 2 out, Audio 1 in and 1 out, Micro SD, up to 512 GB

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Specifications

Channel	Optical	Thermal				
Camera						
Original Resolution	N/A	256 × 192				
Sensor	1/2.8" CMOS	Vanadium oxide uncooled focal plane arrays				
Min. Illumination	Colour: 0.003 lux (F1.6, AGC ON) B/W: 0.002 lux(F1.6,AGC ON) 0 lux with IR	N/A				
Day/Night	IR-cut filter with auto switch (ICR)	N/A				
Pixel Size	N/A	12 um				
NETD	< 50 mk@F1.0@25 °C					
Shutter	Shutter Auto/Manual, 1 to 1/100000 s					
WDR	120 dB					
S/N	>56 dB					
Lens						
Focal Length	4mm	3.2 mm				
Iris	F1.6	F1.0				
Field of View (H)	72.9°	58.0°				
Field of View (V)	44.4°	42.5°				
Field of View (D)	89.8°	72°				
DORI						
DORI Distance (Detect)	90.0m(295.3ft)	N/A				
DORI Distance (Observe)	36.0m(118.1ft)	N/A				
DORI Distance (Recognize)	18.0m(59.1ft)	N/A				
DORI Distance (Identify)	9.0m(29.5ft)	N/A				
Illuminator						
Wavelength	750 nm	N/A				
Illumination Distance (IR)	40m	N/A				
Light On/Off Control	Auto/Manual	N/A				
Video						
Frame Rate	4MP(2688*1520), Max 30fps	960P(1280*960), Max 30fps				





Video Compression	Ultra 265, H.265, H.264, MJPEG			
Video Bit Rate	128 Kbps to 16 Mbps			
U-code	Support			
ROI	Support			
Video Stream	Triple Streams			
OSD	Up to 8 OSDs			
Privacy Mask	Up to 8 areas (8 blacks/ 8 mosaics) N/A			
Image				
White Balance	Auto, Outdoor, Fine Tune, Sodium Lamp, Locked, Auto2			
Digital Noise Reduction	2D/3D DNR			
Flip	Normal, Flip Vertical, Flip Horizontal, 180°, 90° Clockwise, 90° Anti-clockwise			
Defog	Digital Defog	N/A		
Palette	N/A	lava, medical, fusion, arctic, mazarine, rain, puce, white hot, iron oxide red, hot iron, rainbow 1, rainbow 2, rainbow 3, depict hot, ice hot, black hot, red hot, green hot, color 1, color 2		
Intelligent				
Smart Intrusion Prevention	Cross line detection, intrusion detection (support false alarm filtering and the classification of human, non-motor vehicle and vehicle)			
Smoke and Fire Detection	Support N/A			
Temperature Measurement Accuracy	±8 °C (±14.4 °F) or ±8% (whichever is greater)			
Temperature Range	Selectable between -20 °C to 150 °C (-4 °F to 302 °F) and 100 °C to 550 °C (212 °F to 1022 °F)			
Events				
Fire Detection	N/A	Support		
Basic Detection	Motion Detection, Tampering Alarm, Audio Detection	N/A		
General Function	Watermark, IP Address Filtering, Access Policy, ARP Protection, RTSP Authentication, User Authentication, HTTP Authentication, Alarm Input, Alarm Output			
Audio				
Audio Compression	G.711U, G.711A			
Audio Bitrate	128 Kbps			



Two-way Audio	Support		
Suppression	Support		
Sampling Rate	16KHZ		
Storage			
Edge Storage	Micro SD, up to 512 GB		
Network Storage	ANR		
Network			
Protocols	IGMP, RTP, SMTP, IPv4, IPv6, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, 802.1x, SNMP, QoS, SSL/TLS, SSH		
Compatible Integration	ONVIF (Profile S, Profile G, Profile T), API, SDK		
User/Host	Up to 32 users. 3 user levels: administrator, common user and operator		
Client	EZStation, UNV-Link, UNV-Link Pro		
Web Browser	Plug-in required live view: IE 10+, Chrome 45+, Firefox 52+, Edge 79+		
Interface			
Built-in Mic	Support		
Built-in Speaker	Support		
Audio I/O	1 Input: impedance 1 kΩ, amplitude 2.5 V [p-p], 1 Output: impedance 600 Ω, amplitude 2 V [p-p]		
Alarm I/O	2/2		
Serial Port	1 channel RS485 interface		
Network	1 × RJ45 10 M/100 M Base-TX Ethernet		
Video Output	N/A	1 BNC (For debugging)	
Certification			
EMC	CE-EMC (EN 55032: 2015+A1:2020,EN 61000-3-3: 2013+A1: 2019,EN IEC 61000-3-2: 20 EMC 2021,EN 50130-4:2011+A1:2014)		
	FCC (FCC CFR 47 part15 B, ANSI C63.4-2014)		
Safety	CE LVD (EN IEC 62368-1:2020+A11:2020)		
Environment	CE-RoHS (2011/65/EU;(EU)2015/863); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)		
Protection	IP67 (IEC 60529:1989+AMD1:1999+AMD2:2013)		
General			
Power	DC12V(±25%), PoE(IEEE802.3af)		
Power Consumption	Max 12W		

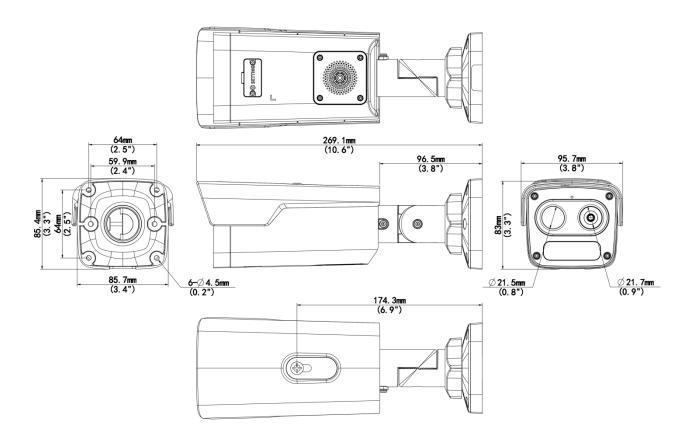




Power Interface	Ø5.5 mm coaxial power plug
Dimensions	269.1 x 95.7 x 83mm (10.6" x 3.75" x 3.25")(L x W x H)
Weight	0.95kg(2.1lb)
Working Environment	-40 °C to 70 °C (-40 °F to 158 °F), Humidity: ≤95% RH (non-condensing)
Storage Environment	-40 °C to 70 °C (-40 °F to 158 °F), Humidity: ≤95% RH (non-condensing)
Surge Protection	6 KV
Reset Button	Support
RTC	Support
Web Client Language	1 Language: English
Live View	
Maximum Bitstream	35
Maximum Bandwidth	50 Mbps
OSD Font	Vector
OSD Color	Support
OSD Character Number	40
Other	
Corridor Mode	Support
Software Version	Q6202



Dimensions



Accessories

TR-JB06-A-IN

Middle Bullet Junction Box(Elegant White)



TR-UP06-B-IN

Bullet Pole Mounting Bracket



TR-A01-IN

NPT 3/4" Waterproof Cable Gland





TR-UP06-C-IN

Pole Mounting Bracket for Bullet Jun ction Box Only



DRI Description

The optimal detection, recognition, and identification distances are calculated according to Johnson's Criteria.

Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animal, human, vehicle, etc), the object must be covered by 6 or more pixels.

Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.

DRI Range Table

Lens	Detection Range (Vehicles:4.0 × 1.4 m)	Detection Range (Humans:1.8 × 0.5 m)	Recognition Ra nge (Vehicles: 4 .0 × 1.4 m)	Recognition Ra nge (Humans: 1. 8 × 0.5 m)	Identification R ange (Vehicles: 1.4 × 4.0 m)	Identification Rang e (Humans: 1.8 × 0 .5 m)
3.2mm	316m	126m	79m	32m	53m	21m
7mm	690m	277m	173m	69m	99m	40m
10mm	986m	395m	247m	99m	141m	56m

Smart Function Table(Thermal)

Lens	SIP Detection Ran ge (Vehicles:4.0 × 1.4 m)	SIP Detection Ran ge (Humans:1.8 × 0.5 m)	Fire Detection Ran ge (target: 0.1x 0.1 m)	Smoking detection (target: cigarette bu tt)	mperature detection (targ et: 0.1m x 0.1m)
3.2mm	60m	30m	13m	2m	8m
7mm	140m	70m	29m	5m	20m
10mm	200m	100m	48m	7m	30m

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