Thermal & Optical Bi-spectrum Network Dome Camera

TIC3612SA-F7-4F6AC-I1

Lighthunter	WDR	Ultra H.265	fire detection	Smart Intrusion Prevention	Built-in Mic	IP 67

POE

Features

- Thermal & Optical 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 & Optical 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

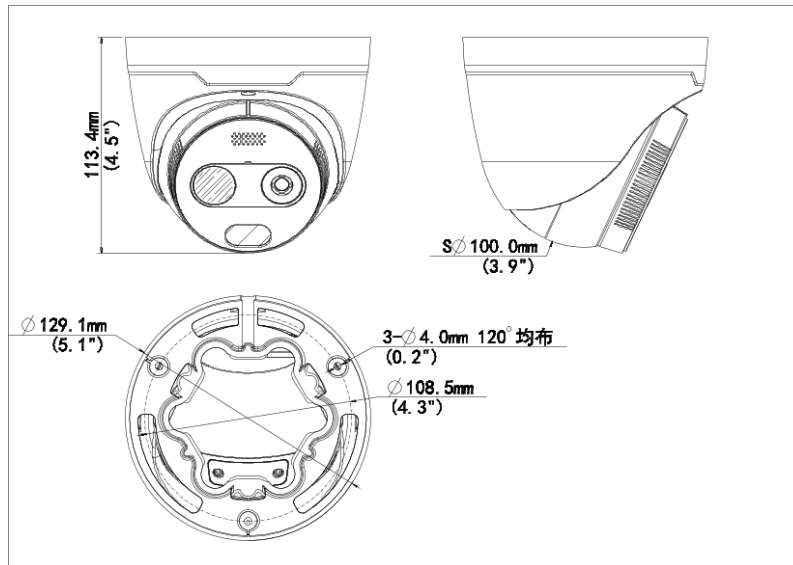- Alarm 2 in and 2 out, Audio 1 in and 1 out, Micro SD, up to 512 GB

Specifications

	Optical	Thermal
Camera	Description	
Sensor	1/2.8" CMOS	Vanadium Oxide Uncooled Focal Plane Arrays
Min. Illumination	Colour: 0.003 lux (F1.6, AGC ON) B/W: 0.002lux(F1.6,AGC ON) 0 lux with IR	N/A
Day/Night	IR-cut filter with auto switch (ICR)	N/A
Original Resolution -Thermal	N/A	256*192
NETD	N/A	< 50 mk @ F1.0 @ 25 ℃
Shutter	Auto/Manual, 1 ~ 1/100000s	N/A
WDR	120dB	N/A
S/N	>56dB	N/A
Lens	Description	
Focal Length	6.0 mm	7.0 mm
Iris	F1.6	F1.0
Field of View (H)	49.1°	25.2°
Field of View (V)	26.9°	19.3°
Field of View (D)	60.4°	31°
DORI	Description	
DORI Distance (Detect)	135.0m(442.9ft)	N/A
DORI Distance (Observe)	54.0m(177.2ft)	N/A
DORI Distance (Recognize)	27.0m(88.6ft)	N/A
DORI Distance (Identify)	13.5m(44.3ft)	N/A

Illuminator	Description	
Wavelength	750 nm	N/A
Illumination Distance (IR)	30m	N/A
Light On/Off Control	Auto/Manual	N/A
Video	Description	
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 ~ 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	Description	
Digital Noise Reduction	2D/3D DNR	
Defog	Digital Defog	N/A
Palette-Thermal	N/A	white hot|lava|iron oxide red|hot iron|medical|arctic|rainbow 1|rainbow 2|rainbow 3|depict hot|ice hot|black hot|mazarine|fusion|red hot|green hot|color 1|color 2|rain|puce
Intelligent	Description	
Smart Intrusion Prevention	Cross line detection, Intrusion detection (support false alarm filtering and the classification of human, non-motor vehicle and vehicle)	Cross line detection, Intrusion detection, Enter area detection, Leave area detection (support false alarm filtering and the classification of human and vehicle)
Smoke and Fire Detection	Support	N/A
Temperature Measurement Accuracy	$\pm 8°$C ($\pm 14.4°$F) or $\pm 8\%$ (whichever is greater)	
Temperature Range	Selectable between -20°C ~ 150°C (-4°F ~ 302°F) and 100°C ~ 550°C (212°F ~ 1022°F)	

Temperature Detection-Thermal	N/A	Thermal channel supports rule-based temperature measurements.Supports real-time display of the highest, lowest, and average temperatures in the rule-defined area on the screen
Smoking Detection-Thermal	N/A	Thermal channel supports the detection of smoking behavior in the environment

Events	Description	
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	Description
Audio Compression	G.711U|G.711A
Audio Bitrate	128 Kbps
Two-way Audio	Support
Suppression	Support
Sampling Rate	16KHZ

Storage	Description
Edge Storage	Micro SD, up to 512 GB
Network Storage	ANR

Network	Description
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 and above, Chrome 45 and above, Firefox 52 and above, Edge 79 and above

Interface	Description
Built-in Mic	Support
Built-in Speaker	Support
Audio I/O	1 Input: impedance 1k Ω ; amplitude 2.5V [p-p]|1 Output: impedance 600 Ω ; amplitude 2V [p-p]

Alarm I/O	2/2		
Serial Port	1 channel RS485 interface		
Network	1 x RJ45 10M/100M Base-TX Ethernet		
Video Output	N/A	1 BNC (For debugging)	
General	Description		
Power	DC12V(±25%), PoE(IEEE802.3af)		
Power Consumption	Max 12W		
Power Interface	Ø 5.5 mm coaxial power plug		
Dimensions	Φ129 x 114 mm(Φ5.08" x 4.49")(Φ x H)		
Weight	0.72kg(1.6lb)		
Working Environment	-40 ° C ~ 70 ° C (-40 ° F ~ 158 ° F), Humidity: ≤95% RH (non-condensing)		
Storage Environment	-40 ° C ~ 70 ° C (-40 ° F ~ 158 ° F), Humidity: ≤95% RH (non-condensing)		
Surge Protection	6KV		
Reset Button	Support		
RTC	Support		
Certification	Description		
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)		
Live View	Description		
Maximum Bitstream	35		
Maximum Bandwidth	50Mbps		
OSD Font	Vector		
OSD Color	Support		
OSD Character Number	40		
Other	Description		
Corridor Mode	Support		

Dimensions

Accessories

TR-JB03-H-IN	TR-A01-IN	TR-JB07/WM03-F-IN
Junction Box for Metal Turret Camera (Support wiring from behind)	NPT 3/4'' Waterproof Cable Gland	Wall Mounting Assembling Bracket with Back Hole for 3 Inch Hemisphere

TR-WM03-B-IN	TR-UP06-IN	TR-UC08-C
Wall Mounting Assembling Bracket for 3 Inch Hemisphere	Universal Pole Mounting Bracket	Bullet&Dome Corner Mounting Bracket

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

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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 Range (Vehicles : 4.0 × 1.4 m)	Recognition Range (Humans : 1.8 × 0.5 m)	Identification Range (Vehicles : 1.4 × 4.0 m)	Identification Range (Humans: 1.8 × 0.5 m)
2.1mm	207m	83m	52m	21m	30m	12m
3mm	296m	119m	74m	30m	49m	17m
7mm	690m	277m	173m	69m	99m	40m

Smart Function Table(Thermal)

Lens	SIP Detection Range (Vehicles:4.0 × 1.4 m)	SIP Detection Range (Humans:1.8 × 0.5 m)	Fire Detection Range (target: 0.1x 0.1 m)	Smoking detection (target: cigarette butt)	Temperature detection (target: 0.1m x 0.1m)
2.1mm	42m	21m	9m	1m	3.5m
3mm	60m	30m	13m	2m	8m
7mm	140m	70m	29m	5m	20m