Thermal & Optical Bi-spectrum Network Positioning System Camera
TIC7626EL-GAF75-4X56-VH1

Lighthunter · **WDR** · **Ultra 265** · **Smart intrusion prevention** · **Auto tracking** · **Fire detection** · **Gyroscope** · **Automatic wiper**

Features

- Thermal & Optical dual-spectrum image, dual video with single IP address, adaptable to various scenes
- Passive infrared thermal imaging, meets the requirement of concealed monitoring and is not affected by bad weather conditions such as fog, smoke, rain, snow, and night
- Thermal channel supports fire detection, and the optical channel can link to the fire position and zoom in for more accurate fire situation judgment
- Thermal & optical dual-spectrum smart intrusion prevention can be enabled simultaneously : cross line, enter area, leave area, intrusion, support smart tracking
- Optical channel supports 4 MP@60 fps, providing smoother motion images
- Optical channel supports gyroscope stabilization for stable pictures
- Optical channel supports heat wave reduction, which can reduce heat wave phenomena and improve image quality
- Vari-focal laser: 800 m (2624.7 ft) distance, proportional to optical zoom of camera module
- Rain-sensing auto wiper, providing clear images in harsh weather
- Supports 1/1 audio in/out, 7/2 alarm in/out, 1 serial port RS485
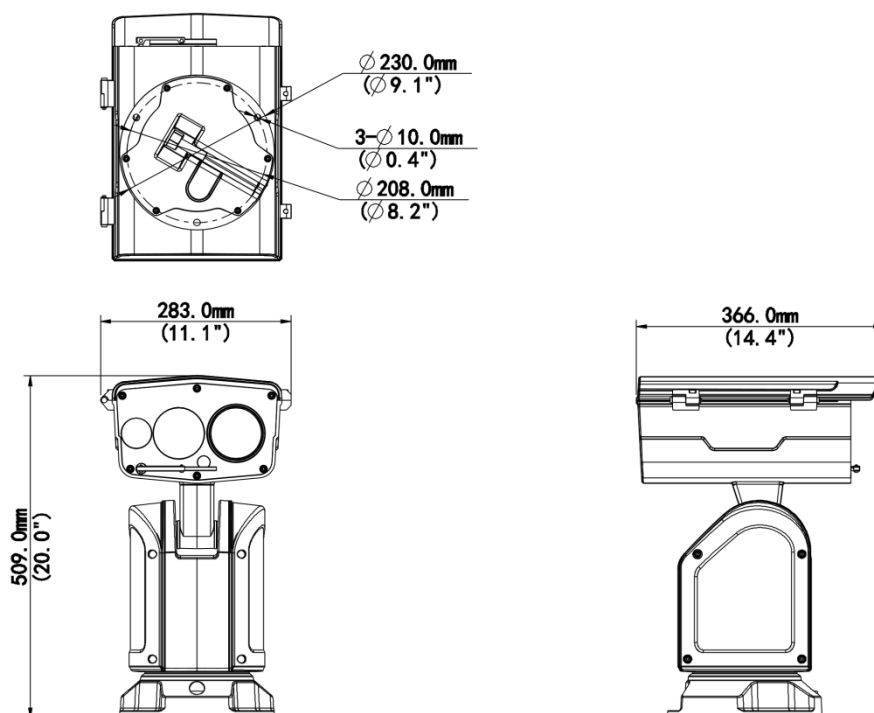- Power supply: DC 48 V ± 25%, DC 24 V ± 15%, AC 24 V ± 25%
- IP66

Specifications

Channel	Optical	Thermal
Camera		

Sensor	1/1.8" CMOS	Vanadium oxide uncooled focal plane arrays
Min. Illumination	Colour : 0.0003lux(F1.2, AGC ON) B/W : 0.0001lux(F1.2, AGC ON)0 Lux with Laser	N/A
Pixel Size	N/A	12 um
NETD	≤ 40 mk@F1.0@25 ℃	
Shutter	Auto/Manual, 1 to 1/100000 s	
WDR	120 dB	
S/N	>52 dB	
Lens		
Focal Length	6 ~ 336 mm	75mm
Optical Zoom	56X	N/A
Iris	F1.2 to F4.6	F1.0
Field of View (H)	57.9°~ 1.6°	6.1°
Field of View (V)	34.6°~ 0.9°	4.8°
Field of View (D)	71.2°~ 1.9°	7.2°
DORI		
DORI Distance (Detect)	155.5m(510.1ft)~4829.4m(15844.5ft)	N/A
DORI Distance (Observe)	62.2m(204.0ft)~1931.8m(6337.8ft)	N/A
DORI Distance (Recognize)	31.1m(102.0ft)~965.9m(3168.9ft)	N/A
DORI Distance (Identify)	15.5m(51.0ft)~482.9m(1584.4ft)	N/A
Illuminator		
Illumination Distance (IR)	Up to 800m(2624.7ft)	N/A
Video		
Video Resolution	Main Stream: 4MP (2688×1520): Max.60fps; Sub Stream: 2MP (1920×1080): Max.60fps;Third Stream: D1(720 x 576): Max.60fps;	1080P(1920*1080), 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	24 areas, up to 8 areas per scene	N/A
Image		
White Balance	Auto, Outdoor, Fine tune, Sodium lamp, Locked, Auto2	N/A
Digital Noise Reduction	2D/3D DNR	
Flip	Normal, Flip vertical, Flip horizontal, 180°	
Defog	Digital defog, Optical defog	N/A
Low Illumination Characteristics	ColorHunter with wise-ISP	
Intelligent		

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 Detection	Support	N/A
Auto Tracking	Support tracking targets automatically, capturing detailed information at a distance	
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	
Sampling Rate	16KHZ	
Storage		
Edge Storage	MicroSD, up to 512 GB	
Network Storage	ANR, NAS (NFS)	
PTZ		
Pan Range	360° (endless)	
Pan Speed	0.02°/s ~ 140°/s	
Tilt Range	-90° ~ 45°	
Tilt Speed	0.02° ~ 50°/s	
Number of Presets	1024	
Preset Image Freeze	Support	
Home Position	Support	
Number of Presets (IPC)	1024	
3D Location	Support	
Number of Patrol	16	
Interface		
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	7/2	
Serial Port	1 × RS485	
Network	1 × RJ45 10 M/100 M/1000 M Base-TX Ethernet + 1 × 100 M/1000 M SFP	
Video Output	N/A	1 BNC (for debugging)
General		
Power	DC 48V±25%、DC 24V±15%、AC 24V±25%	
Power Consumption	Max 135W	
Power Interface	Wires with cold-pressed terminal	
Dimensions	366 x 283 x 509 mm (14.4" x 11.1" x 20.0")(L x W x H)	
Weight	17.98kg(39.64lb)	

Working Environment	-40 ℃ to 70 ℃ (-40 ℉ to 158 ℉), Humidity: ≤ 95% RH (non-condensing)
Storage Environment	-40 ℃ to 70 ℃ (-40 ℉ to 158 ℉), Humidity: ≤ 95% RH (non-condensing)
Surge Protection	6 KV
Reset Button	Support
RTC	Support
Certification	
Protection	IP66
Live View	
OSD Font	Vector
OSD Character Number	40

Dimensions

Accessories

TR-WM08-B

Wall Mounting Bracket for Explosion-proof
Pan-Tilt

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

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)
8385m	3248m	2096m	812m	1398m	541m

Smart Function Table(Thermal)

SIP Detection Range (Vehicles:4.0 × 1.4 m)	SIP Detection Range (Humans:1.8 × 0.5 m)	Fire Detection Range (target: 2 x 2 m)
1300	550	4500m

Notes