

# 4MP Thermal & Optical Dual-spectrum Starlight Intelligent PTZ Dome Camera

TIC6831ER-F50-4X38P



## Key Features



## Optics

- Thermal & Optical dual-spectrum image, dual channels with one IP, adaptable to more various scenes
- Passive infrared thermal imaging, meet the requirement of concealed monitoring and not affected by bad weather condition such as fog, smoke, rain, snow and night etc.
- Starlight illumination
- Smart IR, up to 150m (492ft) IR distance
- Gyroscope stabilization for stable picture
- 2D/3D DNR (Digital Noise Reduction)

## Smart

- Smart linkage: thermal channel support fire detection, optical channel can link to the fire position and zoom in, more accurate to judge fire situation

- Perimeter protection based on deep learning algorithm: cross line, enter area, leave area, intrusion, support smart tracking

## Compression

- 4 Megapixel optical image
- Ultra265, H.264, MJPEG
- Triple streams
- Customize OSD

## Network

- ONVIF Conformance

## Structure

- AC/DC24V or PoE++(IEEE 802.3bt) power supply
- Wide voltage range of  $\pm 25\%$
- Support Wiper
- Alarm 2 in and 1 out, Audio 1 in and 1 out
- IP66

## Specifications

TIC6831ER-F50-4X38P																
Optical Module																
Image sensor	1/1.8", progressive scan, 4.0 megapixel, CMOS															
Lens	5.7 ~ 216.6mm, AF automatic focusing and motorized zoom lens															
Digital Zoom	16															
Optical Zoom	38															
DORI Distance	<table border="1"> <thead> <tr> <th>Lens (mm)</th> <th>Detect (m)</th> <th>Observe (m)</th> <th>Recognize (m)</th> <th>Identify (m)</th> </tr> </thead> <tbody> <tr> <td>5.7</td> <td>97.5(319.9ft)</td> <td>39(128.0ft)</td> <td>19.5(64.0ft)</td> <td>9.8(32.0ft)</td> </tr> <tr> <td>216.6</td> <td>3030(9940.9ft)</td> <td>1212(3976.4ft)</td> <td>606(1988.2ft)</td> <td>303(994.1ft)</td> </tr> </tbody> </table>	Lens (mm)	Detect (m)	Observe (m)	Recognize (m)	Identify (m)	5.7	97.5(319.9ft)	39(128.0ft)	19.5(64.0ft)	9.8(32.0ft)	216.6	3030(9940.9ft)	1212(3976.4ft)	606(1988.2ft)	303(994.1ft)
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216.6	3030(9940.9ft)	1212(3976.4ft)	606(1988.2ft)	303(994.1ft)												
Field of View(H)	58.5° ~ 2.1°															
Field of View(V)	35.0° ~ 1.2°															
Field of View(D)	72.0° ~ 2.5°															
Shutter	Auto/Manual, shutter time: 1~1/100000 s															
Minimum Illumination	Colour: 0.0005 Lux (F1.3, AGC ON) 0 Lux with IR															
Iris	Auto/Manual; F1.3 ~ F4.6															
Day/Night	IR-cut filter with auto switch (ICR)															
Digital noise reduction	2D/3D DNR															
S/N	>55dB															
IR Range	Up to 150m (492ft)															

Defog	Optical Defog & Digital Defog
WDR	120dB
<b>Thermal Module</b>	
Sensor type	Vanadium Oxide Uncooled Focal Plane Arrays
Max. Resolution	384*288
Video format	720P(1280*720), Max 25fps
Pixel size	17μm
Response waveband	8~14μm
NETD	≤50mk
Lens(focal length)	50mm
Field of View (H)	7.5°
Field of View (V)	5.8°
Field of View (D)	9.1°
Focus	Auto/Semiautomatic/Manual
Palette	Up to 20 palettes of optional color, including: 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
Detection Distance	Vehicle: 3480m (target size 4mx1.4m); human: 1395m (target size 1.8mx0.5m);
Recognition Distance	Vehicle: 870m (target size: 4mx1.4m); human: 349m (target size: 1.8mx0.5m);
Identification Distance	Vehicle: 497m (target size: 4mx1.4m); human: 199m (target size: 1.8mx0.5m);
<b>Video</b>	
Compression	Ultra265, H.264, MJPEG
H.264 code profile	Baseline profile, Main Profile, High Profile
Frame Rate	Main Stream: 4MP (2688×1520): Max.60fps; Sub Stream: 2MP (1920×1080): Max.60fps; Third Stream: D1(720 x 576): Max.60fps;
HLC	Supported
BLC	Supported
OSD	Up to 8 OSDs
ROI	Up to 8 areas
Privacy Mask	Up to 24 areas
Motion Detection	Up to 4 areas
<b>Smart</b>	
Fire Detection (thermal module)	Support the detection of fire point in the environment and link the optical camera zoom tracking and alarm
Behavior Detection (thermal module)	Support false alarm filtering Cross Line detection, Intrusion detection, Enter Area detection, Leave Area detection
Exception Detection And Statistics (optical module)	Object Removed, Object Left Behind, Auto-tracking
General Function	Watermark, IP Address Filtering, Tampering Alarm, Alarm input, Alarm output, Access Policy, ARP Protection, RTSP Authentication, User Authentication
<b>Audio</b>	
Audio Compression	G.711U, G.711A
Two-way audio	Supported
Suppression	Supported
Sampling Rate	8 KHZ

**Storage**

Edge Storage	Micro SD, up to 256GB
Network Storage	ANR,NAS(NFS)

**Network**

Protocols	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, 802.1x, SNMP, QoS, RTMP
Compatible Integration	ONVIF (Profile S, Profile G, Profile T), API
Web Browser	Plug-in required live view: IE 10 and above, Chrome 45 and above, Firefox 52 and above, Edge 79 and above

**Pan & Tilt**

Pan Range	360° (endless)
Pan Speed	0.1°/s ~ 180°/s
	Preset speed: 300°/s
Tilt Range	-15° ~ 90° (auto reverse)
Tilt Speed	0.1° ~ 180°/s
	Preset speed: 240°/s
Number of Presets	1024
Patrol	Preset patrol, route patrol, recorded patrol
Home Position	Supported

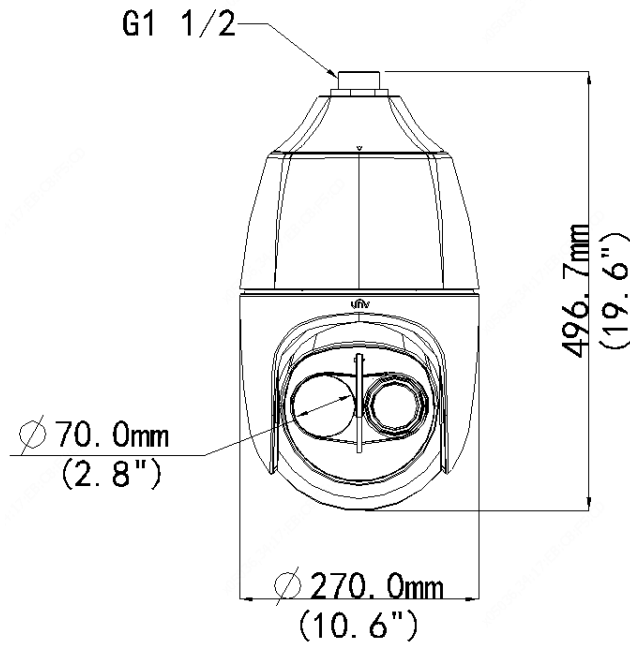
**Interface**

Audio I/O	Audio cable
	Input: impedance 1kΩ; amplitude 2V [p-p]
	Output: impedance 600Ω; amplitude 2V [p-p]
Alarm I/O	2/1
Serial Port	1 RS485
Video Output	N/A
Network	1 RJ45 10M / 100M Base-TX Ethernet

**General**

Power	AC 24V, DC 24V ±25%, PoE++ (IEEE 802.3bt) (IEEE802.3bt switch required)
	Power consumption: Max 57W
Dimensions (Φ × H)	Φ270mm × 496.7mm (Φ10.6" × 19.6")
Weight	10.22kg (22.53lb)
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
Vandal Resistant	N/A
Ingress Protection	IP66

## Dimensions



## Accessories

TR-CE45-IN  
Pendant Mount



TR-WE45-A-IN  
Wall Mount



TR-JB12-IN  
Junction Box



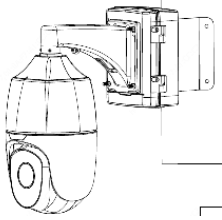
TR-UP08-A-IN/TR-UP08-B-IN  
Pole Mount



TR-UC08-A-IN/ TR-UC08-B-IN  
Corner Mount



Pendant Mount (Indoor Use)	Pole Mount
TR-CE45-IN	TR-UP08-A-IN/TR-UP08-B-IN + TR-JB12-IN+ TR-WE45-A-IN

Corner Mount	/
TR-UC08-A-IN/ TR-UC08-B-IN+ TR-JB12-IN+ TR-WE45-A-IN	/
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\* Product specifications and availability are subject to change without notice.