FEATURES ICONS: LIGHTHUNTER | WDR | ULTRA H.256 | FIRE DETECTION | SMART INTRUSION PREVENTION | BUILT-IN MIC | IP 67 | POE
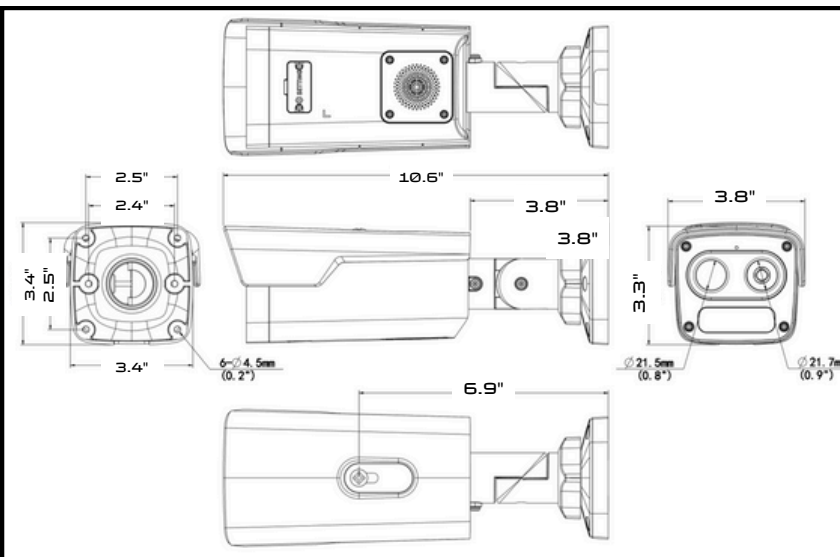
FEATURES

• **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**

• **4MP camera with 2K resolution**

• **Thermal modules 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 clearer**

• **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 G**

DUOTHERM-MK-II-B

Channel	Optical	Thermal
Camera		
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 ℃	
Shutter	Auto/Manual, 1 to 1/100000 s	
WDR	120 dB	
S/N	>56 dB	
Lens		
Focal Length	6.0 mm	7mm
Iris	F1.6	F1.0
Field of View (H)	53.8°	25.0°
Field of View (V)	29.3°	18.8°
Field of View (D)	66.2°	30.8°
DORI		
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		
Wavelength	750 nm	N/A
Ilumination Distance (IR)	50m	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	N/A
Digital Noise Reduction	2D/3D DNR	
Flip	Normal, Flip Vertical, 180°, Flip Horizontal, 90° Clockwise, 90° Anti-clockwise	
Defog	Digital Defog	N/A
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 ℃ (±14.4 ℉) or ±8% (whichever is greater)	
Temperature Range	Selectable between -20 ℃ to 150 ℃ (-4 ℉ to 302 ℉) and 100 ℃ to 550 ℃ (212 ℉ to 1022 ℉)	

Color	Purpose
Yellow	RS485_B
Orange	RS485_A
Gray	Out1_N
Blue	ALM_Out1_P
White/Orange	ALM_Out2_N
Whte/Brown	ALM_Out2_P
Brown	ALM_IN1
White	ALM_IN2
Green	GND
Pink	Audio_IN
Yellow	GND
Purple	Audio_OUT

Events		
Fire Detection	N/A	Support
Basic Detention	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)	
User/Host	Up to 32 users. 3 user levels: administrator, common user and operator	
Client	Guard	
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: 2019+A1: 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) UL (UL 62368-1, 2nd Ed., Issue Date: 2014-12-01)	
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 ℃ 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	
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	