#### **Thermal**

The advantages of cameras in the thermal series are apparent: they don't depend on light conditions, provide constant imaging any time of day, and can penetrate haze and fog. They're your all-weather, all-area, round-the-clock heat detector that can spot fire, monitor temperature, and even catch camouflaged people and vehicles when entering areas considered off-limits.



### **BLH-THERMAL2-9**

# undefined Optical / VGA Thermal Bi-Spectrum Fixed Lens Large Bullet Camera with Hybrid LED and DDA Analytics

Ideal for fire detection, temperature monitoring, and security surveillance, this 5MP Thermal camera can detect, alert and provide **Thermal** complete situational awareness in the most challenging environments. The BLH-THERMAL2-9 incorporates an optic lens and a thermal module, allowing operators to monitor large areas in total darkness, glaring light, and adverse weather by combining thermal and visible light images. Equipped with our DDA™ Analytics (Detect, Distinguish, Alert) and active deterrence mechanisms (white strobe light and speaker), the BLH-THERMAL2-9 delivers a strong and impactful tool for any installation.



















#### **MAIN FEATURES**

- BLH-THERMAL2-9
- Optical Sensor: 1/2.7" CMOS
- Optical Resolution: 2592×1944 25/30FPS (5MP)
- Thermal Sensor:  $12\mu m$   $640\times512$  Vanadium oxide uncooled focal plane detector
- Thermal Resolution: undefined
- Temperature Range: -20° ~ 150° C
- Lens (FoV): Optical: 4mm (73°) Thermal: 9.1mm (48°)
- True Day&Night ICR
- Illumination: 70m (2 High-Power IR LED) + White Strobe light
- Compression: H.265/H.264/MJPEG
- Quantum IoT Nano agent by Check Point™
- General Analytics: Camera Tampering

- Al (Optical Image): Al (Object Recognition): DDA Sterile Area, DDA Line Crossing, DDA Object Counting (Line), DDA Object Counting (Area), DDA Loitering Detection, DDA Illegal Parking Detection
- Al (Face Detection): 10 Faces per frame
- Al (Thermal): DDA Sterile Area, DDA Line Crossing
- Audio Exception
- True WDR (120dB), BLC, HLC, ROI
- SD Card: Event/Schedule Record (Up to 256Gb)
- 4Ch Input, 4Ch Output
- Built-in speaker + Audio input
- ONVIF: Profile M/T/S/G
- Water Proof: IP66
- Weight: ~1230g
- Power: DC12V/~850mA / PoE/~12.5W



## **BLH-THERMAL2-9**



### **SPECIFICATIONS**

Video (Optical)	
Image Sensor	1/2.7" CMOS
Effective Pixels	2592x1944
Electronic Shutter	1/3 ~ 1/100000s
Frame Rate	1-25/30FPS
Day & Night	ICR
Min. Illumination	Day: 0.1lux / Night: 0.02lux (@F1.6, AGC on) 0lux with IR on

Video (Thermal)	
Detector Type	12μm 640×512 Vanadium oxide uncooled focal plane detector
Thermal Resolution	640×512
Temperature Range	-20° ~ 150° C
Measurement Accuracy	±8°C (Varies with target emissivity, ambient conditions, and distance)
Spectral Range	8μm-14μm
Thermal Sensitivity (NETD)	≤40mK(@25°C, F#=1.0)
Color Sets	Black Hot, White Hot, Rainbow, Iron Oxide Red
Temperature Detection Distance	10m (Object size is 0.1m * 0.1m) In Theory: when the size of the object is doubled - the detection distance is also doubled
Fire Detection Distance	30m (Flame size is 0.1m * 0.1m) In Theory: when the size of the flame is doubled - the detection distance is also doubled
DRI Distance Human	Detection: 379m(1243ft) Recognition: 95m(311ft) Identification: 47m(154ft)
DRI Distance Vehicle	Detection: 1163m(3815ft) Recognition: 291m(954ft) Identification: 145m(475ft)

NDAA Compliant		
NDAA Compliant	Yes	
Lens		
Lens (Field of View)	Optical: 4mm (73°) Thermal: 9.1mm (48°)	
Iris	Fixed Iris	

## **BLH-THERMAL2-9**



Lens Mount	M12 Mount	
Lens Would	IVITZ WOUTL	
Image		
Image Settings	AWB, AGC Adjustable, Exposure Mode (Auto) Sharpness, Saturation, Brightness & Contrast Adjustable, Lens distortion correction	
Image Enhancement	True WDR (120dB), BLC, HLC, ROI	
Noise Reduction	3D-DNR	
Image Orientation	Mirror/Flip	
Privacy Zone	Yes	
Housing		
Bracket	3-Axis Bracket	
Illumination	70m (2 High-Power IR LED) White Strobe light	
РоЕ	Yes	
Power Supply	DC12V/~850mA / PoE/~12.5W	
Protection Rate	Water Proof: IP66	
Work Environment	-30°C~60°C, 10%~90% Humidity	
Dimensions	278.3x88.7x100.2mm	
Weight (gross)	~1230g	
Hard Reset Button	Yes	
Network		
Remote Monitoring	IE Browsing, Ossia VMS Software, Provision Cam2 Mobile App	
User Access	Supports simultaneous monitoring of up to 10 users with multi-stream real-time transmission	
Network Protocol	IPv4, IPv6, TCP, UDP, DHCP, NTP, DDNS, 802.1X, RTSP, Multicast, UPnP, Email, FTP, FTPS, SFTP, HTTPS, QoS, HTTP POST, P2P	
ONVIF	Profile M/T/S/G	
Ethernet	100Mbps	

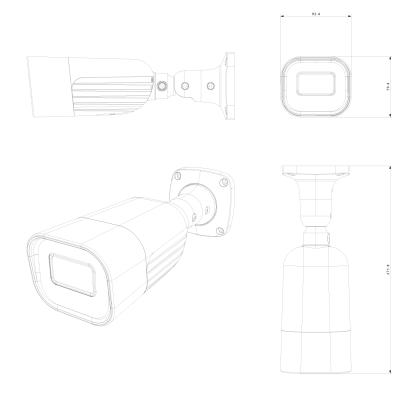
## **BLH-THERMAL2-9**



Events and Analytics		
Analytics	General Analytics: Camera Tampering Al (Optical Image): Al (Object Recognition): DDA Sterile Area, DDA Line Crossing, DDA Object Counting (Line), DDA Object Counting (Area), DDA Loitering Detection, DDA Illegal Parking Detection Al (Face Detection): 10 Faces per frame Al (Thermal): DDA Sterile Area, DDA Line Crossing Audio Exception	
Motion Detection	Yes	
Connectivity		
Network	RJ45 (+PoE)	
Audio Connectivity	Built-in speaker + Audio input	
Alarm	4Ch Input, 4Ch Output	
SD Card	Event/Schedule based Main/Substream recording (Up to 256Gb)	
Power	PoE / DC Socket	
Analog Video Output	No	
Compression		
Video Compression	H.265/H.264/MJPEG	
Multi-Stream	Master Stream: 5MP(2592x1944) / 4MP(2592x1520) / 2K (2560x1440) / 3MP / 2MP / 1MP Substream: 1MP / D1 / CIF / QCIF Third Stream: D1 / CIF / QCIF (1~30fps) Thermal Stream: 1MP / D1 / CIF / QCIF	
Bit Rate	64Kbps ~ 11Mbps@H.265 / 64Kbps ~ 11Mbps@H.264	
Encode Mode	VBR/CBR	
Image Quality	Five levels under VBR; Free adjustment under CBR	
Audio		
Audio compression	G.711A/G.711U	
Communication	2-Way Audio	
3rd Party Cyber Protection		
General	Quantum IoT Nano agent by Check Point™	
Protection Methods	Shell injection protection, File Monitor, Import-Table Protection, Dynamic- Memory Protection	



#### **DIMENSIONS**



### **ACCESSORIES**

