VISHEEN's bispetral thermography network camera Protector B10 is designed to provide early detection in perimeter security applications. The 5MP QHD visible & FPA Vox thermal dual imaging capabilities making it a great co-pilot for most critical surroundings under any light condition, and help with budgets saving. The camera supports a variety of deep learning AI functions such as area intrusion alarm, human & vehicle classification, fire temperature measurement, which helps to identify hidden threats and provides full detail information before taking counter measures.

Features

Human & Vehicle Classification

With a variety of in-house machine learning algorithms supported, the Protector B10 notifies you of people, vehicles or anomalies to help you identify potential threats.

Visual and audio warnings on-site

Protector B10 detects intrusion threats or anomalies and trigger the strobe light with audio alarms to the relevant personnel or intruder.

Temperature Measurement

With ±5℃ thermography capability, Protector B10 can detect a potential fire hazard, such as sudden temperature rise or abnormal temperature reaching a given threshold. By this early warning, it helps prevent fire in advance and allows timely response before the hazard develops and spreads.

Easy Maintenance and Operator Comfort

Single IP address for visible, thermal offers easy-to-use experience for every operator.

Technical Specs

Visible Camera

Image Sensor	1/2.8" progressive scan CMOS			
Resolution	2560 x 1920, 5MP			
Lens	8mm Fixed, F/1.2 Field of view: 35.4°x 26.9°(H x V)			
Min. illumination	0.005Lux @(F/1.2,AGC ON) ,0 Lux with IR			
Electronic Shutter Speed	1/3-1/30000s			
Noise Reduction	2D/3D			
Image Stabilization	N/A			
Day/Night	Auto(ICR)/Manual			
White Balance	Auto/Manual/ATW/Indoor/Outdoor/Sodium Lamp/Streetlight/Natural			
WDR	120dB			
Defog	E-Defog			
Digital Zoom	16x			
DORI Ratings*	Detection	Observation	Recognition	Identification
	160m	63m	32m	16m

*The DORI standard (based on the IEC EN62676-4:2015 international standard) defines different levels of detail for detection (25PPM), observation (62PPM), recognition (125PPM), and Identification (250PPM). This table is for reference only and performance may vary depending on the environment.

Thermal Camera

Imager	Un-cooled FPA Vanadium Oxide microbolometer Pixel pitch: 12µm Spectral range: 8-14µm Sensitivity (NETD): <50mK			
Resolution	384 x 288			

Lens	**MT309**	**MT3013**	**MT3019**	**MT3025**
	9.1mm, F/1.0 Field of view (H x V): 28.4°x21.5°	13mm, F/1.0 Field of view (H x V): 20.1°x15.1°	19mm, F/1.0 Field of view (H x V): 13.8°x10.4°	25mm, F/1.0 Field of view (H x V): 10.5°x8.0°
Color Modes	White hot, Black hot, Fusion, Rainbow, etc. 11 modes user-selectable			
Image Stabilization	N/A			
Digital Zoom	8x			

DRI Ratings*

MT309	Detection	Recognition	Identification
Human (1.7 x 0.6m)	379m	95m	47m
Vehicle (1.4 x 4.0m)	1163m	291m	145m
MT3013	Detection	Recognition	Identification
Human (1.7 x 0.6m)	542m	135m	68m
Vehicle (1.4 x 4.0m)	1661m	415m	208m
MT3019	Detection	Recognition	Identification

Human (1.7 x 0.6m)	792m	198m	99m
Vehicle (1.4 x 4.0m)	2428m	607m	303m
MT3025	Detection	Recognition	Identification
Human (1.7 x 0.6m)	1042m	260m	130m
Vehicle (1.4 x 4.0m)	3194m	799m	399m

*The DRI distances are calculated according to Johnson criteria: detection (1.5 or more pixels), recognition (6 or more pixels), identification (12 or more pixels). This table is for reference only and performance may vary depending on the environment.
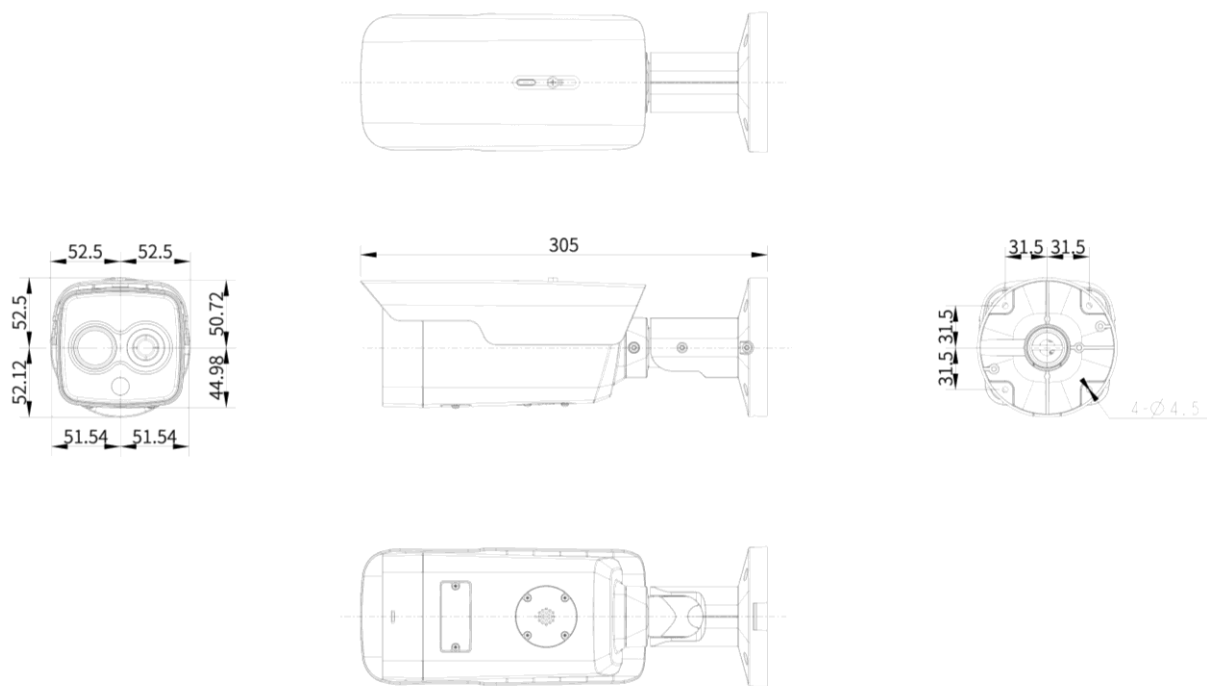
Lighting

IR Distance	35m
IR LED Control	Auto/Low Beam/High Beam/Close
White Light	Strobe Mode

Video and Audio

Video Compression	H.265/H.264/H.264H/ H.264B/MJPEG
Main Stream	Visible: 25/30fps (2560 x 1920, 2592 x 1520, 2560 x 1440, 1920 x 1080, 1280 x 720) Thermal: 25/30fps (1280 x 1024, 1024 x 768)
Sub Stream	Visible: 25/30fps (704 x 576, 352 x 288) Thermal: 25/30fps (704 x 576)
Image Encoding	JPEG
Audio Compression	AAC (8/16kHz), MP2L2(16kHz)

Network

Network Protocols	IPv4, IPv6, HTTP, HTTPS, TCP, UDP, RTSP, RTCP, RTP, ARP, NTP, FTP, DHCP, PPPoE, DNS, DDNS, UPnP, IGMP, ICMP, SNMP, SMTP, QoS, 802.1x, Bonjour
API	ONVIF(Profile S, Profile G, Profile T), HTTP API, SDK
User	Up to 20 users, 2 level: Administrator, User
Security	User authentication (ID and password), IP/MAC address filtering, HTTPS encryption, IEEE 802.1x network access control
Web Browser	IE, EDGE, Firefox, Chrome
Web Languages	English/Chinese
Storage	MicroSD/SDHC/SDXC card (Up to 1Tb) edge storage, FTP, NAS

Analytics

Perimeter Protection	Line crossing, Fence crossing, Intrusion
Temperature Measurement	Support real-time point temperature measurement function; Support temperature alert; Support real-time analysis of temperature and historical temperature query;
Temperature Range	Low temperature mode: -20℃ - 150℃ (-4℉ - 302℉) High temperature mode: 0℃ - 550℃ (32℉ - 1022 ℉)
Temperature Accuracy	Max (±5℃, ±5%)
Cold and Hot Spot Tracking	Support automatic tracking of the hottest and coldest points
Target Distinction	Human/Vehicle Classification
Behavioral Detection	Object left in area, Object removal, Fast moving, Gathering, Loitering, Parking
Events Detection	Motion, Masking, Scene change, Audio detection, SD card error, Network disconnection, IP conflict, Illegal network access

Fire Detection	Support
Smoke Detection	Support
Strong Light Protection	Support
Interface	
Alarm Input	2-ch
Alarm Output	2-ch
Audio Input	1-ch
Audio Output	1-ch
Ethernet	1-ch RJ45 10M/100M
RJ485	1-ch
General	
Casing	IP 67
Power	12V DC/PoE (802.3at), typical 3.4W, max 4.8W, standby 2.9W Power supply port: Ø 5.5 mm coaxial power plug TVS 4000V, Surge protection, Voltage transient protection
Operating Conditions	Temperature: -30℃ to +60℃/-22℉-140℉, Humidity: <90%
Dimensions	317.5×103×95.7mm (W×H×L)
Weight	1.5kg

Ordering Information

Model No.	Description
VS-IPC5008KI-MT309-B10M	5MP Bispectral Thermography Bullet Camera, 9mm athermalized lens
VS-IPC5008KI-MT3013-B10M	5MP Bispectral Thermography Bullet Camera, 13mm athermalized lens
VS-IPC5008KI-MT3019-B10M	5MP Bispectral Thermography Bullet Camera, 19mm athermalized lens
VS-IPC5008KI-MT3025-B10M	5MP Bispectral Thermography Bullet Camera, 25mm athermalized lens

Dimensions

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