



Visheen's Inspector SM10 bispectral PTZ camera integrates a 37x zoom QHD visual module and a VGA thermal module, gives operators the ability to monitor large areas in any light condition and adverse weather. Built-in machine learning algorithms accurately detect and classify human and vehicle threats moving, minimizing false alarms and daily operations costs. The exceptional detection and identification capabilities of Inspector SM10 help integrators provide solutions for challenging imaging problems at critical infrastructure sites and remote facilities.

Features

Human & Vehicle Classification

With a variety of in-house machine learning algorithms supported, the Inspector SM10 notifies you of people, vehicles or anomalies to help you identify potential threats.

Large Area Coverage

6.5-240mm 37x visible zoom lens with Optical Defog, SM10 perfectly balances the field of view with maximizing the detection distance.

Easy Maintenance and Operator Comfort

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

See Clearly in All Light Conditions

With high-end VGA (640*512) Vox uncooled FPA detector and advanced IR LED Array, SM10 presents every detail even in full darkness and adverse weather.

Effective Fire Prevention

Fire prevention with thermal systems is not only about fire detection, but most importantly temperature monitoring. Based on accurate temperature measurement, Inspector SM10 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 allow timely response before the hazard develops and spreads.

Technical Specs

Visible Camera				
Image Sensor	1/1.8" STARVIS progressive scan CMOS			
Resolution	2688 x 1520, 4MP			
Lens	6.5~240mm, 37x motorized zoom, F1.5~4.8 Field of view: 61.8°x 37.2°(H x V)~1.86°x 1.05°(H x V) Near focus distance: 1~5m Zoom speed: <4s(W~T) Focus modes: Semi-auto/Auto/Manual/One-push			
Min. illumination	Color: 0.0005Lux, B/W: 0.0001Lux, AGC ON, F1.5			
Electronic Shutter Speed	1/3~1/30000s			
Noise Reduction	2D/3D			
Image Stabilization	EIS			
Day/Night	Auto(ICR)/Manual			
White Balance	Auto/Manual/ATW/Indoor/Outdoor/Sodium Lamp/Streetlight/Natural			
WDR	120dB			
Optical Defog	Auto/Manual			
Anti-heatwave	Auto/Manual			
Digital Zoom	16x			
DORI Ratings*	Detection	Observation	Recognition	Identification
Human (1.7 x 0.6m)	1987m	788m	397m	198m
Vehicle (1.4 x 4.0m)	4636m	1839m	927m	463m

**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	640 x 512, VGA		
Lens	25mm, F1.0 Field of view: 17.5°x 14°(H x V)		
Color Modes	White hot, Black hot, Fusion, Rainbow, etc. 20 user-selectable		
Image Stabilization	EIS(Electronic)		
Digital Zoom	8x		
DRI Ratings*	Detection	Recognition	Identification
Human (1.7 x 0.6m)	833m	208m	104m
Vehicle (1.4 x 4.0m)	1944m	486m	243m

**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

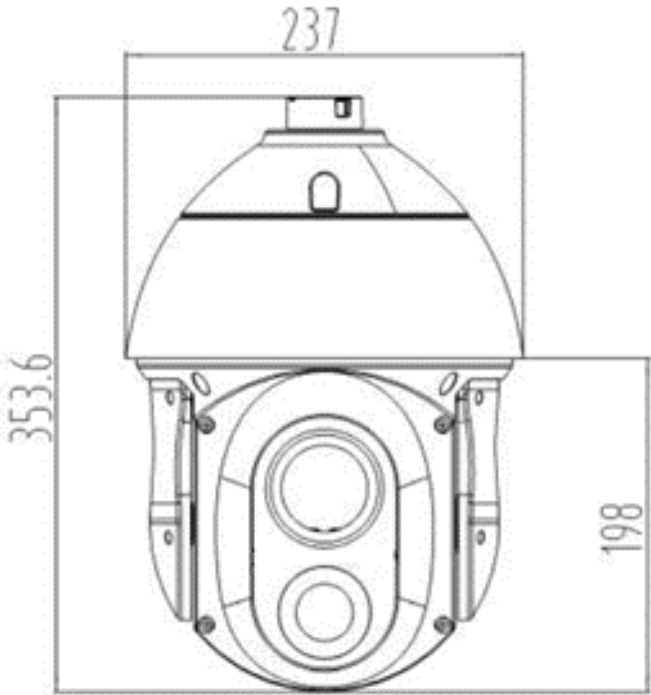
IR Distance	Up to 50m
Modes	On/Off/Auto
Pan/Tilt	
Pan	Range: 360° continuous rotation Speed: 0.1°~ 200°/s
Tilt	Range: -10°~+90° Speed: 0.1°~105°/s
Preset	300
Tour	8, Up to 32 presets per tour
Scan	5
Pattern	5
Park	Preset/Tour/Scan/Pattern
Scheduled Task	Preset/Tour/Scan/Pattern
Power-off Memory	Support
Proportional P/T to Zoom	Support
Video and Audio	
Video Compression	H.265/H.264/H.264H/ H.264B/MJPEG
Main Stream	Visible: 50/60fps (2688 x 1520, 1920 x 1080, 1280 x 720), 16fps@MJPEG Thermal: 25fps (1280 x 1024, 1280 x 720)
Sub Stream	Visible: 25/30fps (1920 x 1080, 1280 x 720, 704 x 576, 352 x 288) Thermal: 25fps (704 x 576, 352 x 288)
Image Encoding	JPEG, 1~7fps (2688 x 1520)
OSD	Name, Time, Preset, Temperature, P/T Status, Zoom, Address, GPS, Image overlay, Abnormal info
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°F ~ 302°F) High temperature mode: 0℃ ~ 550℃ (32°F ~ 1022 °F)

Temperature Accuracy	Max ($\pm 3^{\circ}\text{C}$, $\pm 3\%$)
Cold and Hot Spot Tracking	Support automatic tracking of the hottest and coldest points
Target Distinction	Human/Vehicle/Vessel 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
Auto Tracking	Multiple detection tracking modes
Interface	
Alarm Input	1-ch
Alarm Output	1-ch
Audio Input	1-ch
Audio Output	1-ch
Ethernet	1-ch RJ45 10M/100M
General	
Casing	IP 66
Power	24V AC, typical 19W, max 22W, AC24V/3A Power adapter included TVS 6000V, Surge protection, Voltage transient protection
Operating Conditions	Temperature: $-30^{\circ}\text{C} \sim +60^{\circ}\text{C}$ / $22^{\circ}\text{F} \sim 140^{\circ}\text{F}$, Humidity: <90%
Dimensions	$\Phi 353 \times 237\text{mm}$
Weight	8kg

Ordering Information

Model No.	Description
VS-SDZ4037KI-RT6025-T3	6 inch 4MP Bispectral Thermography PTZ Camera

Dimensions



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