Blackbody (included)

The V1110B-THM-TEMP is a thermal camera designed to automatically provide *accurate* and swift measurement of a person's body temperature when entering a premises. For more than 2 years, the camera has proven to be reliable and easy to use. The camera includes Blackbody technology that ensures measurement accuracy is maintained as environmental conditions change. It is designed to meet FDA requirements.

The camera provides for the contactless measurement of people as they enter a facility, providing an immediate notification and audible warning when a high temperature is detected. The face and temperature are displayed on a viewing monitor and recorded. The system is designed for use in a wide range of applications, from small to enterprise, including hospitals, schools, airports and retail establishments; it is ideal for lobbies and other access points.

Product at a Glance

▸ ±0.54° F (±0.3° C) accuracy for medical body temperature detection

▸ *Blackbody* thermal detection technology maintains camera calibration accuracy in changing environments; 24 VDC power supply included

▸ Resolution: Thermal: 400 x 300; Visible: 2 MP (1920x1080)

▸ Bi-spectral: 8 mm (thermal) and 2.7-12 mm motorized (visible) lens

▸ Events sent to VMS along with temperature overlayed on the video; simple snapshots can be created in standalone software

▸ Facial mask detection and alarming

▸ Response time of 30 milliseconds

▸ Designed to FDA standards

▸ H.265/H.264 Smart Encoding; M-JPEG compression

▸ Intelligent function alarms: smart body detection, perimeter, line cross, object left/object removed

▸ 2 alarm inputs, 2 alarm outputs

▸ Two-way audio; 1 audio input, 1 audio output

▸ Powered by PoE; 12 VDC

▸ Fixed or portable mounting options

The camera is supplied with a Blackbody for maintainig calibration as well as one wall and ceiling mount for mounting the camera and the Blackbody; addtional mounts and Blackbodies can be ordered. A tripod is available as an option, providing the user with portable or fixed installation capabilities.

The V1110B-THM-TEMP supports H.265/H.264 compression technology, significantly reducing file sizes and conserving valuable network bandwidth; M-JPEG is also supported. The camera provides motion detection, temperature alarm, disk alarm and I/O alarm triggers. Audio In/Out is supported.

Installation of the cameras is made easy and cost effective with Power over Ethernet (IEEE 802.3af), which eliminates the need for power cables; 12 VDC is also accepted.

The camera system can be configured for either standalone or integrated applications. For the integrated solution, it can be used with an existing or new Vicon Valerus™ VMS or other ONVIF-compliant VMS systems. Valerus integration includes alarming of the camera when a high temperature is detected to display live on monitors and provide alarm recording with the face and measured temperature displayed. The alarm video is stored for review and search in Valerus. Administrative personnel can receive notifications of the alarm for access from their PC or via mobile app. A mobile app is available as well. For standalone solutions, the software is included with the camera and can be added to an existing PC or a Vicon supplied server.

Specifications

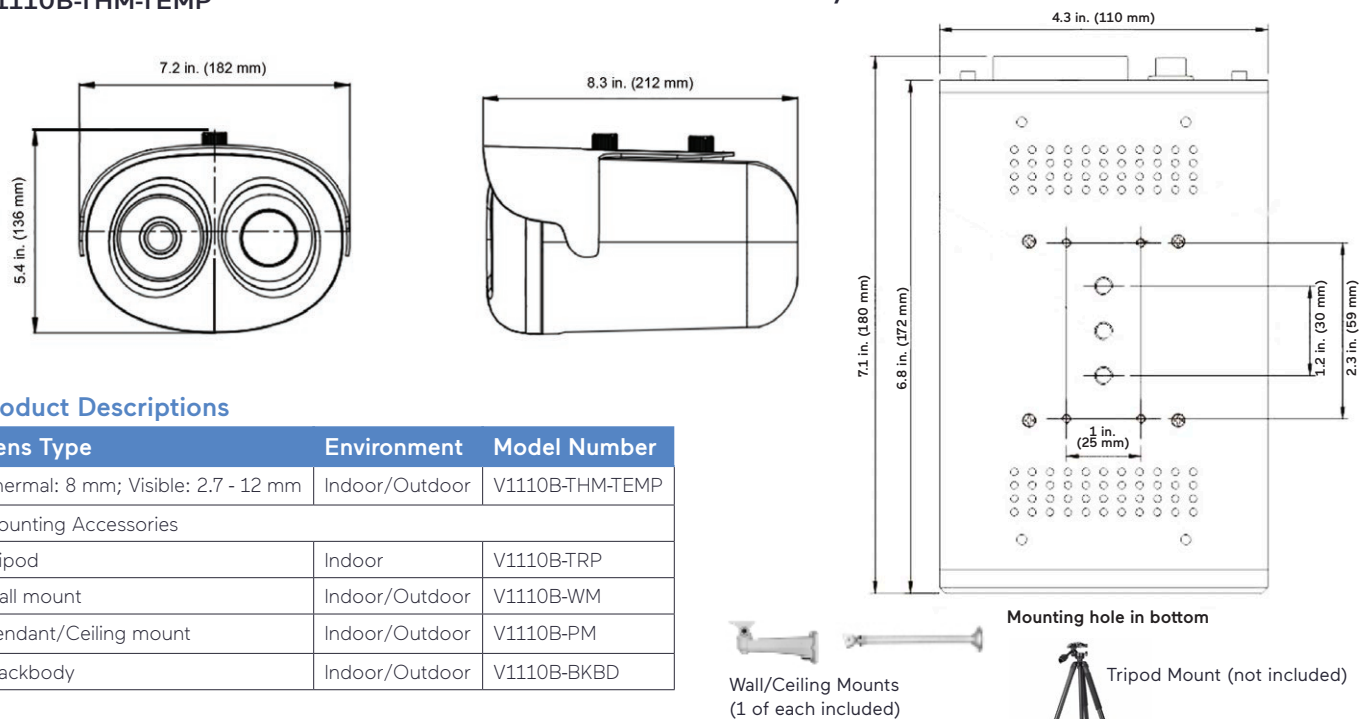| Model	V1110B-THM-TEMP
Thermal Camera	
Device Type:	Long-life uncooled IRFPA Microbolometer
Max Resolution:	400 (H) x 300 (V) effective pixels
Image Settings:	Temperature Measurement and Parameters. Configurable brightness, sharpness, contrast. ROI (8 zones). Mirror. FFC. Defog. DNR (3D). Alarm Triggers including Temperature alarm, Motion detection, Disk alarm, I/O alarm. Audio. Privacy Masking (4 areas). Digital zoom (16x). Image correction. Image color mode. Polarity/LUT.
Video Content Analysis (VCA):	Smart Body Detection; Single Line Cross; Double Line Cross; Object Left; Object Removed; Perimeter
Pixel Pitch:	17 µm
Spectral Range:	8 to 14 µm
Color Palettes:	Black-Heat/White-Heat/Rainbow/Iron-Red; up to 17 modes
Temperature Detection:	Body detection (supports 16 targets). Temperature Alarm for over temperature and temperature difference. Precision: ±0.54° F (±0.3° C) with blackbody (emission rate, distance, ambient temperature, etc.). Response Time: <30 ms.
Sensitivity:	40 mK @F1.0, 300K
Visible Camera	
Image Sensor:	1/2.8" Sony CMOS
Resolution:	1920 (H) x 1080 (V)
Shutter Speed:	1/5 - 1/20,000 sec
Wide Dynamic Range:	True WDR; 120 dB
Min. Illumination:	Color: 0.1 lux @ f/1.2, AGC On BW: 0.01 lux @ f/1.2, AGC On
S/N Ratio:	>55 dB
Lenses	
Thermal Lens:	Fixed (manual focus); 8 mm; f/1.0
Visible Lens:	Motorized; 2.7 - 12 mm; f/1.6 - f/2.9
Angle of View:	Thermal: 46° horizontal; 35° vertical Visible: 105° - 32°
Network Video Transmission	
Network:	10/100 Base-T Ethernet; RJ-45; one IP address for two channels
Image Compression:	H.265; H.264; M-JPEG
Video Streaming:	Thermal: Main Stream/Sub Stream: D1/CIF Visible: Main Stream 1920×1080/1280×720; Sub Stream D1/VGA/640×360/CIF/QVGA
Max. Frame Rate:	Thermal: Up to 30/25 fps (D1, Main stream; CIF, sub-stream) Visible: Up to 30/25 fps (1920×1080/1280×720, Main stream; D1/VGA/640×360/CIF/QVG, sub-stream)
Max. User Access:	Up to 10 users
Audio:	Two-way audio 1 audio input, 1 audio output;
Protocols:	IPv4/IPv6, TCP/UDP, RTP/RTSP/RTCP, SMTP, HTTP, DHCP, PPPOE, ONVIF G/S/Q, DNS, SIP, 802.1x
Web Browser:	Up to Internet Explorer® 11; Chrome; Firefox
Alarms:	2 alarm inputs/2 alarm outputs
Security:	User security authentication; Reset, Hardware WatchDog
Mechanical	
Construction:	Metal
Mounting:	Surface-mount. Mounting tripod available.
Controls and Connectors:	PoE/Network: RJ-45 (waterproof). Alarm In/Out: 3-pins/4-pins. Power: connector for 12 VDC power supply. Audio In/Out: jacks. Reset to default button. RS-485: 2-pins. Micro SD card slot.
Dimensions:	Length: 8.3 in. (212 mm); Width: 7.2 in. (182 mm); Height: 5.4 in. (136 mm)
Weight:	4.4 lb (2 kg)

Specifications

Electrical	
Input Power:	PoE; 12 VDC
Current:	12 VDC: 0.83 A
Power Consumption:	10 W max
Environmental	
Operating Conditions:	Temp: -22 to 140° F (-30 to 60° C) Humidity: 0% - 90%, non-condensing
Approvals:	FCC; CE; IP66; ONVIF G/S/Q
Country of Origin:	China
Warranty:	2 years

Blackbody	
Temperature Range:	86 to 122° F (30 to 50° C)
Emissive Area:	2.8 x 2.8 in. (72 x 72 mm)
Temperature Resolution:	0.018° F (0.01° C)
Accuracy:	±0.36° F (±0.2° C) [@ factory calibration, ambient temperature 73.4° F ±9° F (23° C ±5° C)]
Stability:	±0.27° F/10 min (±0.15° C/10 min)
Emissivity:	0.97 ±0.02
Power Supply:	24 VDC; power supply included
Operating Ambient Temperature:	32 to 104° F (0 to 40° C) Humidity: 20% - 90%, non-condensing
Dimensions:	7.1 x 4.3 x 4.3 in. (180 x 110 x 110 mm)
Weight:	3.1 lb (1.4 kg)

Dimension Drawings [in. (mm)]

V1110B-THM-TEMP

Blackbody

Mounting hole in bottom

Wall/Ceiling Mounts (1 of each included)

Tripod Mount (not included)

Product Descriptions

Lens Type	Environment	Model Number
Thermal: 8 mm; Visible: 2.7 - 12 mm	Indoor/Outdoor	V1110B-THM-TEMP
Mounting Accessories		
Tripod	Indoor	V1110B-TRP
Wall mount	Indoor/Outdoor	V1110B-WM
Pendant/Ceiling mount	Indoor/Outdoor	V1110B-PM
Blackbody	Indoor/Outdoor	V1110B-BKBD

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