

PT-BF5421-T

Thermal Network Bullet Camera



- 400 × 300 uncooled VOx thermal sensor technology
- Athermalized lens (thermal), focus-free
- Supports skin temperature measurement
- Measurement Accuracy: $\pm 0.3^{\circ}\text{C}$, with blackbody
- Active deterrence with white light & siren
- Various lens optional (7.5/13mm)
- 2/2 alarm in/out
- Micro SD memory, IP67, PoE, ePoE

System Overview

Featuring a fixed lens bullet camera, this series provides an all-in-one solution that is especially beneficial for skin temperature measurement. This camera should be used as a pre-screening tool to help identify persons who may have elevated skin temperatures so that they can be rescreened with an FDA cleared thermometer to verify elevated body temperatures so that facilities can enact their security protocols.

Functions

Uncooled VOx Technology

This thermal camera uses uncooled Vox sensor technology. Their small size and better performance make them a cost-effective solution for thermal security and temperature measurement.

High Sensitivity

High thermal sensitivity (<40 mK) allows cameras to capture more image details and temperature difference information for a more accurate reading.

Protection

This camera allows for wide input voltage tolerance, suitable for the most unstable conditions for outdoor applications as well as indoor. It's 5kV lightning rating provides effective protection for both the camera and its structure against lightning.

Body Temperature Measurement

This thermal camera is characterized by non-contact, multi-object, rapid temperature measurement with decreased risk to the testers. It can be conveniently deployed in public places with dense personnel and can be used for the efficient and safe preliminary screening of skin temperature anomalies.

This camera is not designed or intended for the diagnosis, treatment or prevention of any disease or condition. This solution is a screening tool that businesses and households can use to identify individuals with elevated skin temperature as compared to a customizable reference temperature on entering their premises. This camera should be used as a tool for the initial triage of individuals as they are entering the facility, it is recommended that you confirm elevated body temperatures with a secondary evaluation method (NCIT or clinical grade contact thermometer). This device has been submitted to the FDA for approval, but is not yet FDA-cleared. In response to the current evolving public health emergency and continued shortages of temperature measurement products, FDA has issued an Immediately-in-Effect Guidance document to help expand the availability of thermographic systems used for initial body temperature measurements for triage use during this public health emergency.



Technical Specification

Thermal	
Detector Type	Vanadium oxide uncooled focal plane detector
Effective Pixels	400 × 300
Pixel Pitch	17 μm
Spectral Range	8 μm–14 μm
Thermal Sensitivity (NETD)	≤40 mK
Focal Length	13 mm
Field of View	13 mm: horizontal: 30°, vertical: 22.6°
Focus Mode	Fixed-focal
Aperture	F1.0
Digital Detail Enhancement (DDE)	Yes
Thermal Image Stabilization	Electronic Image Stabilization
AGC	Auto; manual
Noise Reduction	2D NR; 3D NR
Image Flip	90°/180°/mirror
Color Palettes	18 color modes selectable such as Whitehot/Blackhot/Ironrow/Icefire.
Temperature Measurement Range	30°C ~+45°C
Temperature Accuracy	Max ±0.3°C with blackbody Max ±1°C without blackbody
Temperature Mode	Spot: 12 Line: 12 Area: 12 Support 12 rules simultaneously
Visible	
Image Sensor	1/2.8" 2M CMOS
Effective Pixels	1920(H)x1080(V)
Electronic Shutter Speed	1/1 ~ 1/30,000s
Min. Illumination	Color: 0.002Lux; B/W: 0.0002Lux; 0Lux (IR on)
IR Distance	35m
IR On/Off Control	Auto/Manual
IR LEDs	1
Focal Length	8mm
Max Aperture	F1.9
Angle of View	H: 40° V: 22°
Audio and Video	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG

Resolution	Thermal Main stream: (1280 × 1024/1024 × 768/640 × 480/256 × 192@), 1280 × 960 by default; Sub stream: (640 × 512/256 × 192@), 256 × 192 by default Visible Main stream: (1920 × 1080/1280 × 720/704 × 576@), 1920 × 1080 by default; Sub stream: (704 × 576/512 × 288@), 355 × 288 by default
Audio Compression	G.711a; G.711mu; AAC; PCM
Image Encoding Format	JPEG

General Function	
Two-way Talk	Yes
Network Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/V6; SNMP; QoS; Upnp; NTP
Region of Interest (ROI)	Yes
Edge Storage	FTP; Micro SD card (256G, hot plug)
Interoperability	ONVIF; CGI; SDK
Browser	IE: IE8 and the later, and explorer with IE core Google: 42 and the earlier Firefox: 42 and the earlier Safari: 10 and the earlier
User/Host	20 channels at most (the total bandwidth 64M)
Security	Authorized username and password; Attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access
User Management	Support 20 users at most and users are classified as two groups-administrator group And user group.
Malfunction Detection	Network disconnection; IP addresses Conflict; SD card error (status or storage space)

Port	
Analog Video Output	1 channel of CVBS output with BNC port
Network	1 10M/100M Ethernet port (RJ-45)
Alarm Input	2 channels
Alarm Output	2 channels
Audio Input	1 channel
Audio Output	1 channel
Alarm Linkage	SD card recording/on-off output/ Siren and light/email/PTZ/snapshot
Alarm Event	Motion detection/privacy mask/audio detection/SD card abnormality/network abnormality/anti-burn warning
RS-485	1 channel

Power	
Power Supply	12V±20% DC, 1.2A, PoE (802.3af), ePoE

Power Consumption	Basic: 5.0W Maximum: 12W (power adapter excluded)
Environment	
Operating Temperature	10°C to +30°C
Operating Humidity	≤95%
Self-Adaptive	Auto heating to protect the chip under the Cold environment

Accessories



DH-PFA121-V2

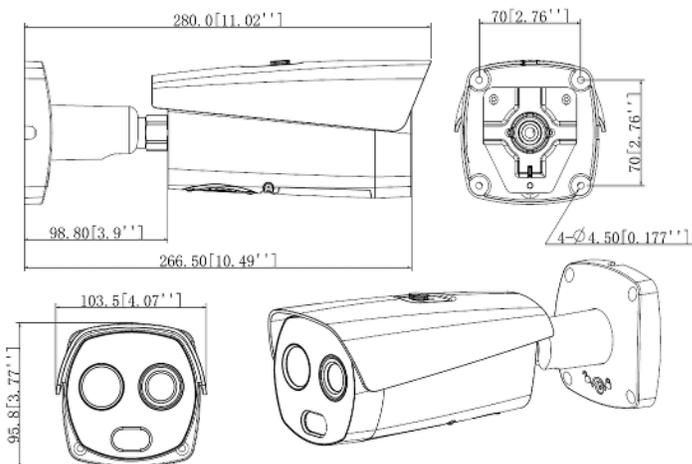


DH-PFA151



DH-PFA152-E

Dimensions (mm [inch])



Physical Characteristics

Protection Grade	IP67, anti-surge 6KV, anti-elctrostatic 8KV (touched by objects), anti-elctrostatic 15KV (air)
Packaging Dimensions	365 mm × 175 mm × 176 mm (14.37" × 6.89" × 6.93")
Net Weight	≤1.4 kg (3.09 lb)
Gross Weight	≤1.9 kg (4.19 lb)
Power Adaptor	Selectable
Lens	Contained
Certification	
Certifications	CE; FCC

Ordering Information

Type	Part Number	Description
	PT-BF5421P-TB13F8	(with temperature measurement function)

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