

DH-TPC-BF5421-T

Thermal Body Temperature Measurement Camera



- 400 × 300 uncooled VOx thermal sensor technology
- Athermalized lens (thermal), focus-free
- Support body temperature measurement
- Support ROI, Motion Detection, Color Palettes
- Measurement Accuracy: $\pm 0.3^{\circ}\text{C}$, with blackbody
- Active deterrence with white light & siren
- Built-in 2/1 alarm in/out
- Micro SD memory, IP67, PoE, ePoE



System Overview

Featuring a dual lens, fixed bullet camera, this series provides an all-in-one solution for capturing video surveillance for indoor and outdoor applications. Together with Thermal and Visible Technology, that is especially beneficial for body temperature measurement. The camera is the perfect solution for dark, small area monitoring applications. The series combines one thermal camera for monitoring in total darkness and one visible camera with Smart IR for confirming details.

Functions

Uncooled VOx Technology

Dahua thermal cameras use uncooled VOx sensor technology. Their small size and better performance make them a cost – effective solution for thermal security.

High Sensitivity

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

Protection

The cameras allow for wide input voltage tolerance, suitable for the most unstable condition for out door applications, Its 6KV lightning rate provides effective protection for both the camera and its structure against lightning.

Body Temperature Measurement

Dahua thermal cameras characterized by non – contact, multi – objective, rapid, and no risk to temperature testers, etc. It can be conveniently deployed in public place with dense personnel, and can be used for efficient and safe preliminary screening of temperature anomalies.

Technical Specification

Thermal

Detector Type	Vanadium oxide uncooled focal plane detector
Effective Pixels	400 x 300
Pixel Pitch	17 μm
Spectral Range	8 μm – 14 μm
Thermal Sensitive (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

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(2 Streams) 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(2 Streams) Main stream: (1920 × 1080/1280 × 720/704 × 576@), 1920 × 1080 by default; Sub stream: (704 × 576/352 × 288@), 355 × 288 by default
Frame Rate	Thermal: 50Hz: Main stream (1fps-25fps),25fps by default; sub stream (1fps-25fps),15fps by default; 60Hz: Main stream (1fps-30fps),30fps by default; sub stream (1fps-30fps),15fps by default; Visual: 50Hz: Main stream (1fps-25fps),25fps by default; sub stream (1fps-25fps),15fps by default; 60Hz: Main stream (1fps-30fps),30fps by default; sub stream (1fps-30fps),15fps by default;
Day/Night	Auto(ICR)/Color/B/W
BLC Mode	BLC/HLC/WDR
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; HTTPS;IEEE802.1X
Region of Interest (ROI) & Automatic Motion Detection	Yes
Edge Storage	FTP; Micro SD card (256G, hot plug)
Interoperability	CGI; Dahua SDK; ONVIF
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)
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Port

Network	1 10M/100M Ethernet port (RJ-45)
Alarm Input	2 channels
Alarm Output	1channel
Audio Input	1 channel
Audio Output	1 channel
Alarm Linkage	SD card recording/on-off output/ siren and light/email/PTZ/snapshot
Alarm Event	SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio abnormal; security exception;Temperature Measurement;blackbody exception
RS-485	1 channel

Power

Power Supply	12V±20% DC(1.2A), PoE(IEEE802.3af), ePoE
Power Consumption	Basic: 5.0W Maximum: 12W (power adapter excluded)

Environment

Operating Temperature	10°C to +30°C
Storage Temperature	-40°C to +70°C
Operating Humidity	≤95%
Self-Adaptive	Auto heating to protect the chip under the cold environment

Physical Characteristics

Protection Grade	IP67, anti-surge 6KV, anti-elctrostatic 8KV (touched by objects), anti-elctrostatic 15KV (air)
Packaging Dimensions	365mm×175mm×176mm(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

Certification

Certifications	CE, FCC
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Ordering Information

Type	Part Number	Description
DH-TPC- BF5421-T	DH-TPC-BF5421P-TB13F8	(with temperature measurement) Thermal: 400 × 300, 13 mm lens, PAL
	DH-TPC-BF5421N-TB13F8	(with temperature measurement) Thermal: 400 × 300, 13 mm lens, NTSC

Accessories



DH-PFA121-V2



DH-PFA151



DH-PFA152-E

Dimensions (mm [inch])

