

DH-TPC-BF5421-T

Thermal Network Bullet Camera



- 400 × 300 uncooled VOx thermal sensor technology
- Athermalized lens (thermal), focus-free
- Support body temperature measurement
- Measurement Accuracy: $\pm 0.3^{\circ}\text{C}$, with blackbody
- Active deterrence with white light & siren
- Various lens optional (7.5/13 mm)
- 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 body temperature measurement.

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 ($< 40 \text{ mK}$) allows cameras to capture more image details and temperature difference information.

Protection

The camera allows for wide input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating 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 places 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 × 300	
Pixel Pitch	17 μm	
Spectral Range	8 μm–14 μm	
Thermal Sensitivity (NETD)	≤40 mK	
Focal Length	7.5 mm; 13 mm	
Field of View	7.5 mm: horizontal: 53.7°, vertical: 39.7° 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 Lens

Focal Length	4mm	8mm
Max Aperture	F2.0	F1.9
Angle of View	H: 84° V: 45°	H: 40° V: 22°

Audio and Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG	
Resolution	Main stream: (1280 × 1024/1280 × 960/1280 × 720/400 × 300), 1280 × 960 by default; Sub stream: (640 × 512/640 × 480/400 × 300@), 400 × 300 by default	
Audio Compression	G.711a; G.711mu; AAC; PCM	
Image Encoding Format	JPEG	

General Function

Two-way Talk	Yes
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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; Dahua 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

Physical Characteristics

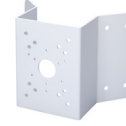
Protection Grade	IP67, anti-surge 6KV, anti-electrostatic 8KV (touched by objects), anti-electrostatic 15KV (air)
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Packaging Dimensions	365 mm × 175 mm × 176 mm (14.37" × 6.89" × 6.93")
Net Weight	≤1.4 kg (3.09 lb)
Gross Weight	≤1.9 kg (4.19 lb)
Power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

Accessories



DH-PFA121-V2

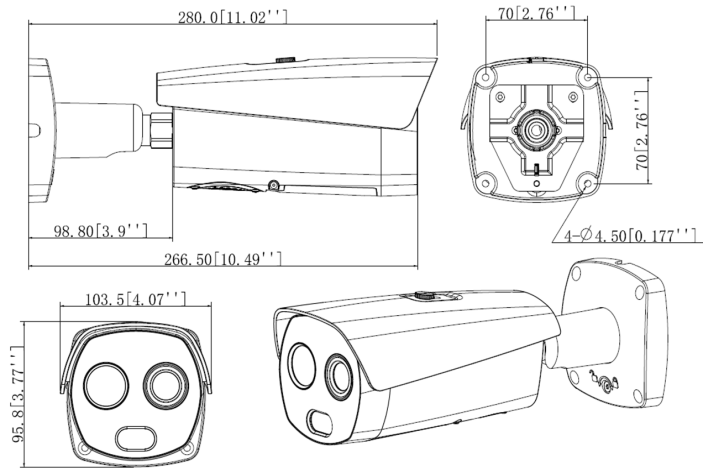


DH-PFA151



DH-PFA152-E

Dimensions (mm [inch])



Ordering Information

Type	Part Number	Description
DH-TPC-BF5421-T	DH-TPC-BF5421P-TB7F4	(with temperature measurement function) Thermal: 400 × 300 7.5 mm lens
	DH-TPC-BF5421N-TB7F4	Thermal: 400 × 300 7.5 mm lens
	DH-TPC-BF5421P-TB13F8	(with temperature measurement function) Thermal: 400 × 300 13 mm lens
	DH-TPC-BF5421N-TB13F8	Thermal: 400 × 300 13 mm lens