

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	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 × 576/352 × 288@), 355 × 288 by default
Effective Pixels	400 × 300		
Pixel Pitch	17 μm		
Spectral Range	8 μm–14 μm		
Thermal Sensitivity (NETD)	≤40 mK	Audio Compression	G.711a; G.711mu; AAC; PCM
Focal Length	13 mm	Image Encoding Format	JPEG
Field of View	13 mm: horizontal: 30°, vertical: 22.6°	General Function	
Focus Mode	Fixed-focal	Two-way Talk	Yes
Aperture	F1.0	Network Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP
Digital Detail Enhancement (DDE)	Yes	Region of Interest (ROI)	Yes
Thermal Image Stabilization	Electronic Image Stabilization	Edge Storage	FTP; Micro SD card (256G, hot plug)
AGC	Auto; manual	Interoperability	ONVIF; CGI; Dahua SDK
Noise Reduction	2D NR; 3D NR	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
Image Flip	90°/180°/mirror	User/Host	20 channels at most (the total bandwidth 64M)
Color Palettes	18 color modes selectable such as Whitehot/Blackhot/Ironrow/Icefire.	Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access
Temperature Measurement Range	30°C ~+45°C	User Management	Support 20 users at most and users are classified as two groups-administrator group and user group.
Temperature Accuracy	Max ±0.3°C with blackbody Max ±1°C without blackbody	Malfunction Detection	Network disconnection; IP addresses conflict; SD card error (status or storage space)
Temperature Mode	Spot: 12 Line: 12 Area: 12 Support 12 rules simultaneously	Port	
Visible		Analog Video Output	1 channel of CVBS output with BNC port
Image Sensor	1/2.8" 2M CMOS	Network	1 10M/100M Ethernet port (RJ-45)
Effective Pixels	1920(H)x1080(V)	Alarm Input	2 channels
Electronic Shutter Speed	1/1 ~ 1/30,000s	Alarm Output	2 channels
Min. Illumination	Color: 0.002Lux; B/W: 0.0002Lux; 0Lux (IR on)	Audio Input	1 channel
IR Distance	35m	Audio Output	1 channel
IR On/Off Control	Auto/Manual	Alarm Linkage	SD card recording/on-off output/siren and light/email/PTZ/snapshot
IR LEDs	1	Alarm Event	Motion detection/privacy mask/audio detection/SD card abnormality/network abnormality/anti-burn warning
Focal Length	8mm	RS-485	1 channel
Max Aperture	F1.9	Power	
Angle of View	H: 40° V: 22°	Power Supply	12V±20% DC, 1.2A, PoE (802.3af), ePoE
Audio and Video			
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG		

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-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
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Ordering Information

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

Accessories



Dimensions (mm [inch])

