

DH-TPC-BF5421-T

Thermal Network Bullet Camera



- 400 × 300 uncooled VOx thermal sensor technology ·
- Athermalized lens (thermal), focus-free
- Supports object surface temperature measurement
Supports biological surface temperature measurement
- Measurement Accuracy: $\pm 0.3^{\circ}\text{C}$, with blackbody
- Active deterrence with white light & siren
- 2/2 alarm in/out
- IP67, PoE, ePoE

System Overview

Featuring a fixed lens bullet camera, this series provides an all-in-one solution. This series is designed for security screening.

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.

Temperature Measurement

Dahua thermal cameras characterized by non-contact, multi-objective, rapid, and no risk for detecting object and biological temperature. This product is not for medical use.

Technical Specification			
Thermal		Thermal	
Detector Type	Vanadium oxide uncooled focal plane detector	Resolution	Main stream: (1280 × 1024/1024 × 768/640 × 480/256 × 192@), 1280 × 960 by default; Sub stream: (640 × 512/256 × 192@), 256 × 192 by default
Effective Pixels	400 × 300		Visible
Pixel Pitch	17 μm		Main stream: (1920 × 1080/1280 × 720/704 × 576@), 1920 × 1080 by default; Sub stream: (704 × 576/352 × 288@), 355 × 288 by default
Spectral Range	8 μm–14 μm		
Thermal Sensitivity (NETD)	≤40 mK		
Focal Length	13 mm	Audio Compression	G.711a; G.711mu; AAC; PCM
Field of View	13 mm: horizontal: 30°, vertical: 22.6°	Image Encoding Format	JPEG
Focus Mode	Fixed-focal	General Function	
Aperture	F1.0	Two-way Talk	Yes
Digital Detail Enhancement (DDE)	Yes	Network Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP
Thermal Image Stabilization	Electronic Image Stabilization	Region of Interest (ROI)	Yes
AGC	Auto; manual	Storage	FTP
Noise Reduction	2D NR; 3D NR	Interoperability	ONVIF; CGI; Dahua SDK
Image Flip	90°/180°/mirror	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
Color Palettes	18 color modes selectable such as Whitehot/Blackhot/Ironrow/Icefire.	User/Host	20 channels at most (the total bandwidth 64M)
Temperature Measurement Range	30°C ~+45°C	Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access
Temperature Accuracy	Max ±0.3°C with blackbody Max ±1°C without blackbody	User Management	Support 20 users at most and users are classified as two groups-administrator group and user group.
Temperature Mode	Spot: 12 Line: 12 Area: 12 Support 12 rules simultaneously	Malfunction Detection	Network disconnection; IP addresses conflict
Visible		Port	
Image Sensor	1/2.8" 2M CMOS	Analog Video Output	1 channel of CVBS output with BNC port
Effective Pixels	1920(H)x1080(V)	Network	1 10M/100M Ethernet port (RJ-45)
Electronic Shutter Speed	1/1 ~ 1/30,000s	Alarm Input	2 channels
Min. Illumination	Color: 0.002Lux; B/W: 0.0002Lux; 0Lux (IR on)	Alarm Output	2 channels
IR Distance	35m	Audio Input	1 channel
IR On/Off Control	Auto/Manual	Audio Output	1 channel
IR LEDs	1	Alarm Linkage	Output/siren and light/email/PTZ/snapshot
Focal Length	8mm	Alarm Event	Motion detection/privacy mask/audio detection/network abnormality/anti-burn warning
Max Aperture	F1.9	RS-485	1 channel
Angle of View	H: 40° V: 22°	Power	
Audio and Video		Power Supply	12V±20% DC, 1.2A, PoE (802.3af), ePoE
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
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-electrostatic 8KV (touched by objects), anti-electrostatic 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-TD13F8	(with temperature measurement function)
	DH-TPC-BF5421N-TD13F8	Thermal: 400 × 300 13 mm lens

Accessories



DH-PFA121-V2



DH-PFA151



DH-PFA152-E

Dimensions (mm [inch])

