

# DH-TPC-BF5421-T

## Thermal Temperature Monitoring Camera



- 400 × 300 Vanadium Oxide Uncooled FPA
- Athermalized lens (thermal camera), focus-free
- Smart linkage with strobe light & audio
- Temperature Accuracy  $\pm 0.3^{\circ}\text{C}$  with black body
- Temperature Measurement Range:  $30^{\circ}\text{C}$  to  $45^{\circ}\text{C}$
- IP67; Micro SD storage

### System Overview

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

### Technical Specification

#### Thermal

Effective Pixels	400 × 300	
Pixel Pitch	17 $\mu\text{m}$	
Spectral Range	8 $\mu\text{m}$ –14 $\mu\text{m}$	
Thermal Sensitivity (NETD)	$\leq 40\text{mK}@f/1.0$	
Focal Length	10 mm	13 mm
Field of View	Horizontal: 36.2°, Vertical: 27.5°;	Horizontal: 30°, Vertical: 22.6°;
Focus Mode	Athermalized	
Aperture	F/1.0	
Digital Detail Enhancement (DDE)	Yes	
AGC	Auto; Manual	
Noise Reduction	2D NR; 3D NR	
Image Flip	180°/Mirror	
Color Palettes	18 (Whitehot/Blackhot/Ironrow/Icefire/Fusion/Rainbow/Globow/Iconbow1/Iconbow2 .etc)	
Temperature Measurement Range	$30^{\circ}\text{C}$ to $45^{\circ}\text{C}$ ( $86^{\circ}\text{F}$ to $113^{\circ}\text{F}$ )	

Temperature Accuracy	$\pm 0.3^{\circ}\text{C}$ (with black body) when the environment temperature is $10^{\circ}\text{C}$ to $30^{\circ}\text{C}$ ( $50^{\circ}\text{F}$ to $86^{\circ}\text{F}$ )
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#### Visible

Image Sensor	1/2.8 inch CMOS	
Effective Pixels	1920 × 1080	
Max. Resolution	2MP	
Electronic Shutter Speed	1/30000s–1s	
Min. Illumination	Color: 0.01 Lux@F1.6 Black & white: 0.001 Lux@F1.6 0 Lux (IR on)	
IR Illumination Distance	$\geq 50$ m (164 ft)	
IR Illuminator On/Off Control	Auto; Manual	
Focal Length	6 mm	8 mm
Aperture	F/2.0	F/2.0
Field of View	Horizontal: 52.8°, Vertical: 30.3°	Horizontal: 40°, Vertical: 22°
Focus Mode	Fixed	
Close Focus Distance	0.7 m (2.3 ft)	
BLC	Yes	
WDR	Yes	
HLC	Yes	
White Balance	Auto/Manual/Indoor/Outdoor/Tracking/Sodium lamp/Street lamp/Natural	
AGC	Auto; Manual	
Noise Reduction	2D NR; 3D NR	

S/N Ratio	≥ 55 dB
Region of Interest (RoI)	Yes
Image Flip	180°/Mirror
Exposure Compensation	Yes

### Video and Audio

Video Compression	H.265/H.264M/H.264H/H.264B
Resolution	Thermal 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 Visible Main stream: 1080P (1920 × 1080), 720P (1280 × 720), D1 (704 × 576). 1080P by default Sub stream: D1 (704 × 576), CIF (352 × 288). CIF by default
Frame Rate	Thermal (50Hz): Main stream: 1fps–25fps adjustable. 25fps by default; sub stream: 1fps–25fps adjustable. 15fps by default. Visible (50Hz): Main stream: 1fps–25fps adjustable. 25fps by default; sub stream: 1fps–25fps adjustable. 15fps by default.
Audio Compression	G.711a; G.711mu; AAC; PCM

### Network

Protocol	HTTP; HTTPS; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP; Multicast; SFTP; 802.1x;
Edge Storage	Micro SD card (256G)
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
User/Host	20 users at most (total bandwidth 64M)
Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access

### Certification

Certifications	CE: EN55032:2015; EN61000-3-2:2014 FCC: CFR 47 FCC Part15 subpart B; ANSI C63.4-2014
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### Port

Ethernet	1 10M/100M Ethernet port (RJ-45)
Audio Input	1
Audio Output	1
Alarm Input	2
Alarm Output	1
RS-485	1 pair

### Power

Power Supply	12V±20% DC; POE (802.3af); ePOE
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Power Consumption	Basic consumption: <8W (12V DC) Max consumption: <18W (12V DC, without power adapter)
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### Environment

Operating Temperature	10°C to +30°C (50°F to 86°F)
Operating Humidity	≤93%@40°C (104°F)
Ingress Protection	IP67

### Structure

Product Dimensions	291.6 mm × 103.8 mm × 96.7 mm ( 11.48" × 4.09" × 3.81" )
Packaging Dimensions	365 mm × 175 mm × 176 mm ( 14.37" × 6.89" × 6.93" )
Net Weight	≤1.8 kg (3.97 lb)
Gross Weight	≤2.3 Kg (5.07 lb)

### Ordering Information

Type	Model	Description
Camera	DH-TPC-BF5421P-TB13F8	Thermal: 13 mm Visible: 8 mm
	DH-TPC-BF5421N-TB13F8	Thermal: 13 mm Visible: 8 mm
	DH-TPC-BF5421P-TD13F8	Thermal: 13 mm Visible: 8 mm
	DH-TPC-BF5421N-TD13F8	Thermal: 13 mm Visible: 8 mm
	DH-TPC-BF5421P-TD10F6	Thermal: 10 mm Visible: 6 mm
	DH-TPC-BF5421N-TD10F6	Thermal: 10 mm Visible: 6 mm

### Dimensions (mm[inch])

