

DH-TPC-BF5421-T

Thermal Body Temperature Monitoring Camera



- 400 × 300 Uncooled VOx focal plane detector
- 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°C to 45°C
- IP67; ePOE; Micro SD storage

System Overview

Featuring two video channels, it can realize the high accuracy temperature measurement. This series is designed for preliminary body temperature screening.

Technical Specification

Thermal

Max. Resolution	400 × 300	
Pixel Pitch	17 μm	
Spectral Range	8 μm –14 μm	
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 Control	Fixed	
Aperture	F/1.0	
Digital Detail Enhancement (DDE)	Yes	
AGC	Auto; Manual	
Noise Reduction	2D NR; 3D NR	
Image Flip	180°	
Color Palettes	18 (Whitehot/Blackhot/Ironrow/Icefire/Fusion/Rainbow/Globow/Iconbow1/Iconbow2 .etc)	
Temperature Measurement Range	30°C to 45°C (86°F to 113°F)	
Temperature Accuracy	$\pm 0.3^{\circ}\text{C}$ (with black body) when the environment temperature is 10°C to 30°C (50°F to 86°F)	

Visible

Image Sensor	1/2.8 inch CMOS	
Max. Resolution	1920 × 1080	
Pixel	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	≥ 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: 38.4°, Vertical: 22.2°
Focus Control	Fixed	
Close Focus Distance	1.6 m (5.2 ft)	2.0 m (6.6 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	<p>Thermal</p> <p>Main stream: 1280 × 1024, 1280 × 960, 1280 × 720, 400 × 300. 1280 × 960 by default</p> <p>Sub stream: 640 × 512, 640 × 480, 400 × 300. 400 × 300 by default</p> <p>Visible</p> <p>Main stream: 1080P (1920 × 1080), 720P (1280 × 720), D1 (704 × 576). 1080P by default</p> <p>Sub stream: D1 (704 × 576), CIF (352 × 288). CIF by default</p>
Frame Rate	<p>Thermal (50Hz):</p> <p>Main stream: 1fps–25fps adjustable. 25fps by default; sub stream: 1fps–25fps adjustable. 15fps by default.</p> <p>Visible (50Hz):</p> <p>Main stream: 1fps–25fps adjustable. 25fps by default; sub stream: 1fps–25fps adjustable. 15fps by default.</p>
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;
Storage	Micro SD card (512G)
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

Network	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
Power Consumption	Basic consumption: <8W (12V DC) Max consumption: <18W (12V DC, without power adapter)

Environment

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

Structure

Product Dimensions	292.1 mm × 103.8 mm × 96.7 mm (11.50" × 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])

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