

# DH-TPC-BF5401-T

## Thermal Network Bullet Camera



- 400 × 300 uncooled VOx thermal sensor technology
- Athermalized lens (thermal), focus-free
- Support temperature measurement
- Various lens optional (7.5/13/25 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 temperature measurement. Together with Thermal technology, the camera's long range capabilities are able to be utilized even at night.

### 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 (< 40mK) makes cameras capture more image details and temperature difference information.

#### Temperature Measurement

Dahua thermal cameras (-T models) provide remote temperature monitoring functionality with the ability to set temperature threshold alarms. Object temperatures can be monitored in daytime or at night, making them ideal for usage in power plant or oil extraction applications where overheating can be dangerous. When the temperature exceeds the set threshold, an alarm is triggered. The temperature range is between -20 °C to 550 °C.

### Intelligent Video System (IVS)

IVS is a built-in video analytics algorithm that delivers intelligent functions to monitor a scene for tripwire violations, intrusion detection. A camera with IVS quickly and accurately responds to monitoring events in a specific area.

### Environmental

With a temperature range of -40 °C to +70 °C (-40 °F to +158 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

### 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.

**Technical Specification**

Thermal			
Detector Type	Vanadium Oxide Uncooled Focal Plane Detector		
Max. Resolution	400 × 300		
Pixel Pitch	17µm		
Spectral Range	8µm–14µm		
Thermal Sensitivity (NETD)	≤ 40mK@f/1.0		
Focal Length	7.5 mm	13 mm	25 mm
Field of View	H: 53.7° × V: 39.7°	H: 30° × V: 22.6°	H: 15.5° × V: 11.6°
Effective Distance Human (1.8 m × 0.5 m)	D: 221 m (725.07 ft) R: 57 m (187.01 ft) I: 28 m (91.86 ft)	D: 382 m (1253.28 ft) R: 98 m (321.52 ft) I: 49 m (160.76 ft)	D: 735 m (2411.42 ft) R: 189 m (620.08 ft) I: 95 m (311.68 ft)
	D: 558 m (1830.71 ft) R: 147 m (482.28 ft) I: 74 m (242.78 ft)	D: 1020 m (3346.47 ft) R: 255 m (836.61 ft) I: 127 m (416.67 ft)	D: 1961 m (6433.73 ft) R: 490 m (1607.61 ft) I: 245 m (803.81 ft)
	Focus Mode: Athermalized		
Aperture	F1.0		
Digital Detail Enhancement (DDE)	Yes		
Image Stabilization	Electronic Image Stabilization		
Digital Zoom	19×		
AGC	Auto; Manual		
Noise Reduction	2D NR; 3D NR		
Image Flip	90°/180°/mirror		

Intelligence	
Advanced Intelligence	Fire Detection & Alarm Cold & Hot Spot Trace Tripwire & Intrusion Human & Vehicle Classification

Temperature Measurement	
Temperature Range	Low Temperature Mode: -20°C to +150°C (-4°F to +302°F) High Temperature Mode: 0°C to +550°C (+34°F to +1022°F)
Temperature Accuracy	Max (±2°C, ±2%) Operating Temperature: -20°C to +60°C (-4°F to +140°F)
Temperature Mode	Spot: 12 Line: 12 Area: 12 Support 12 rules simultaneously

Video and Audio	
Video Compression	H.265/H.264M/H.264H/H.264B/MJPEG
Resolution	Main Stream: SXGA (1280 × 1024)/960P (1280 × 960)/720P (1280 × 720)/400 × 300, 1280 × 960 by default Sub Stream: 640 × 512/640 × 480/400 × 300, 400 × 300 by default

Frame Rate	50Hz: Main Stream: 1fps–25fps, 25fps by default; sub stream: 1fps–25fps, 15fps by default 60Hz: Main Stream: 1fps–30fps, 30fps by default; sub stream: 1fps–30fps, 15fps by default
Audio Compression	G.711a; G.711mu; PCM

General Function	
Network Protocol	HTTP; HTTPS; 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)
Interoperability	ONVIF; CGI; DAHUA SDK
Browser	IE: IE9 and the later (Edge not support) Google: 42 and the earlier Firefox: 52 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)

Certification	
Certifications	CE; FCC

Port	
Analog Video Output	1 channel of CVBS output with BNC port
Network	1 10M/100M Ethernet port (RJ-45)
Audio Input	1
Audio Output	1
Alarm Input	2
Alarm Output	2
RS-485	1 pair

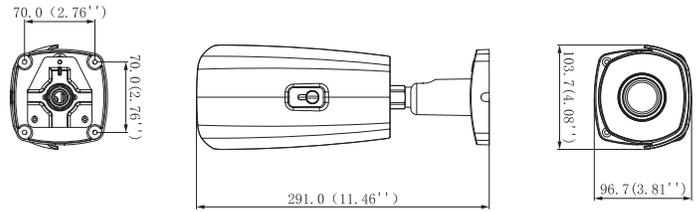
Power	
Power Supply	12V±20% DC, 1.2A, PoE (802.3af), ePoE
Power Consumption	Basic: 5.0W Maximum: 13W (power adapter excluded)

Environment	
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
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)
Product Dimensions (L × W × H)	291 mm × 103.7 mm × 97 mm (11.46" × 4.06" × 3.82")
Packaging Dimensions (L × W × H)	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)
Lens	Contained
Power Adaptor	Selectable

**Dimensions (mm[inch])**



**Ordering Information**

Type	Model	Description
DH-TPC-BF5401-T	DH-TPC-BF5401P-TB7	(with temperature measurement function) Thermal: 400 × 300 7.5 mm lens
	DH-TPC-BF5401N-TB7	
	DH-TPC-BF5401P-TB13	(with temperature measurement function) Thermal: 400 × 300 13 mm lens
	DH-TPC-BF5401N-TB13	
	DH-TPC-BF5401P-TB25	(with temperature measurement function) Thermal: 400 × 300 25 mm lens
	DH-TPC-BF5401N-TB25	

**Accessories**



DH-PFA121-V2



DH-PFA151



DH-PFA152-E

Wall Mount	Corner Mount	Pole Mount
PFA121	PFA121+PFA151	PFA121+PFA152-E