**Dahua**
TECHNOLOGY

# DH-TPC-BF5421-T

Thermal Body Temperature Measurement Camera



· 400 × 300 uncooled VOx thermal sensor technology

· Athermalized lens (thermal), focus-free

· Support body temperature measurement

· Measurement Accuracy: ±0.3°C, with blackbody

· Active deterrence with white light & siren

· 2/1 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 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.

Onvif

## Technical Specification

### Thermal

| | |
|---|---|
| Detector Type | Vanadium oxide uncooled focal plane detector |
| Effective Pixels | 400 × 300 |
| Pixel Pitch | 17 µm |
| Spectral Range | 8 µm–14 µm |
| Thermal Sensitivity (NETD) | ≤40 mK@f/1.0 |
| Focal Length | 13 mm |
| Field of View | 13 mm: horizontal: 30°, vertical: 22.6° |
| Focus Mode | Fixed-focal |
| Aperture | F1.0 |
| Digital Detail Enhancement (DDE) | Yes |
| Thermal Image Stabilization | Electronic Image Stabilization |
| AGC | Auto; manual |
| Noise Reduction | 2D NR; 3D NR |
| Image Flip | 90°/180°/mirror |
| Color Palettes | 18 color modes selectable such as Whitehot/Blackhot/Ironrow/Icefire. |
| Temperature Measurement Range | 30°C ~+45°C(86 ℉ ~113 ℉ ) |
| Temperature Accuracy | ±0.3°C with blackbody |
| Temperature Mode | Spot: 12<br>Line: 12<br>Area: 12<br>Support 12 rules simultaneously |

### Visible

| | |
|---|---|
| Image Sensor | 1/2.8" 2M CMOS |
| Effective Pixels | 1920(H)x1080(V) |
| Electronic Shutter Speed | 1/1 ~ 1/30,000s |
| Min. Illumination | Color: 0.005Lux; B/W: 0.0005Lux; 0Lux (IR on) |
| IR Distance | ≥50m |
| IR On/Off Control | Auto/Manual |
| IR LEDs | 1 |
| Focal Length | 8mm |
| Max Aperture | F2.0 |
| Angle of View | H: 40° V: 22° |

### Audio and Video

| | |
|---|---|
| Video Compression | H.265; H.264; H.264H; H.264B; MJPEG |
| Resolution | Thermal<br>Main stream:<br>(1280 × 1024/1024 × 768/640 × 480/256 × 192@), 1280 × 960 by default;<br>Sub stream: (640 × 512/256 × 192@), 256 × 192 by default<br>Visible<br>Main stream: (1920 × 1080/1280 × 720/704 × 576@), 1920 × 1080 by default;<br>Sub stream: (704 × 576/352 × 288@), 355 x 288 by default |
| Frame Rate | Thermal:<br>50Hz:<br>Main stream (1fps-25fps),25fps by default;<br>sub stream (1fps-25fps),15fps by default;<br>60Hz:<br>Main stream (1fps-30fps),30fps by default;<br>sub stream (1fps-30fps),15fps by default;<br>Visual:<br>50Hz:<br>Main stream (1fps-25fps),25fps by default;<br>sub stream (1fps-25fps),15fps by default;<br>60Hz:<br>Main stream (1fps-30fps),30fps by default;<br>sub stream (1fps-30fps),15fps by default; |
| Audio Compression | G.711a; G.711mu; AAC; PCM |
| Image Encoding Format | JPEG |

### General Function

| | |
|---|---|
| Two-way Talk | Yes |
| Network Protocol | HTTP; 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, hot plug) |
| Interoperability | CGI; Dahua SDK |
| Browser | IE: IE9 and the later,<br>Google: 42 and the earlier<br>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) |

### Port

| | |
|---|---|
| Analog Video Output | 1 channel |
| Network | 1 10M/100M Ethernet port (RJ-45) |
| Alarm Input | 2 channels |
| Alarm Output | 1 channel |
| Audio Input | 1 channel |
| Audio Output | 1 channel |

| Alarm Linkage | Record/Snatch/IO trigger/Sound-light alarm/Email |
|---|---|
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio abnormal; security exception;Temperature Measurement;blackbody exception |
| RS-485 | 1 channel |

## Power

| Power Supply | 12V±20% DC, 1.2A, PoE (802.3af), ePoE |
|---|---|
| Power Consumption | Basic: 5.0W<br>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

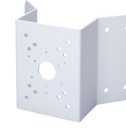| Protection Grade | IP67, anti-surge 6KV, anti-elctrostatic 8KV (touched by objects), anti-elctrostatic 15KV (air) |
|---|---|
| Packaging Dimensions | 365 mm × 175 mm × 176 mm (14.37" × 6.89" × 6.93") |
| Net Weight | ≤1.4 kg (3.09 lb) |
| Gross Weight | ≤1.9 kg (4.19 lb) |

## Certification

| Certifications | CE; FCC |
|---|---|

## Accessories



| DH-PFA121-V2 | DH-PFA151 | DH-PFA152-E |
|---|---|---|

## Dimensions (mm [inch])



## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| DH-TPC-BF5421-T | DH-TPC-BF5421P-TD13F8 | (with temperature measurement function) Thermal: 400 × 300 13 mm lens |
| | DH-TPC-BF5421N-TD13F8 | |