

# DHI-TPC-BF5401-T

## Thermal Network Bullet Camera



- 400x300 VOx uncooled thermal sensor technology
- Athermalized Lens (thermal), Focus-free
- Support temperature measurement
- Various lens optional (7.5/13/25/35mm)
- 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 long distance video surveillance in outdoor applications. 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) allows cameras to 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, and abandoned or missing objects. 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 ±15% 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 Camera

|                           |  |
|---------------------------|--|
| Image Sensor              | Vanadium Oxide Uncooled Focal Plane Detector                                       |
| Effective Pixels          | 400(H)x300(V)  |
| Pixel Size                | 17µm   |
| Thermal Sensitivity(NETD) | ≤ 40mK@f/1.0   |
| Spectral Range            | 8µm-14µm   |
| Image Setting             | Brightness/Sharpness/ROI/AGC/FFC/3D DNR  |
| Color Palettes            | 18(Whitehot/Blackhot/Ironrow/Icefire/Fusion/Rainbow/Globow/Iconbow1/Iconbow2 .etc) |

#### Thermal Lens

|   |                              |                               |                                |                                |
|---|------------------------------|-------------------------------|--------------------------------|--------------------------------|
| Lens Type   | Fixed/F1.0                   |                               |                                |                                |
| Focus Control                                     | Athermalized, Focus-free     |                               |                                |                                |
| Focal Length                                      | 7.5mm                        | 13mm                          | 25mm                           | 35mm                           |
| Angle of View                                     | H: 53.7°<br>V: 39.7°         | H: 30.2°<br>V: 22.6°          | H: 15.5°<br>V: 11.6°           | H: 11.1°<br>V: 8.3°            |
| Effective Distance <sup>①</sup><br>Man(1.8m*0.5m) | D: 221m<br>R: 57m<br>I: 28m  | D: 382m<br>R: 98m<br>I: 49m   | D: 735m<br>R: 189m<br>I: 95m   | D: 1030m<br>R: 265m<br>I: 132m |
| Effective Distance<br>Vehicle(4m*1.4m)            | D: 490m<br>R: 126m<br>I: 63m | D: 850m<br>R: 219m<br>I: 109m | D: 1634m<br>R: 420m<br>I: 210m | D: 2288m<br>R: 588m<br>I: 294m |

#### Temperature Measurement

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

#### Video

|                                      |  |
|--------------------------------------|--|
| Compression                          | H.265 / H.264 / MJPEG  |
| Frame Rate                           | Main Stream:<br>Thermal: 1280x1024 / 720P / 400x300 @25/30fps<br>Sub Stream:<br>Thermal: 640x512 / 400x300 @25/30fps |
| Bit Rate Control                     | CBR/VBR  |
| Bit Rate                             | H.264: 640 ~ 8192Kbps  |
| Motion Detection                     | Off/On (4 zone, Rectangle)   |
| Region of Interest                   | Off/On (4 zone)  |
| Electronic Image Stabilization (EIS) | NA   |
| Digital Zoom                         | 4x(19 levels)  |
| Flip                                 | 180°   |
| Mirror                               | Off/On   |

|                 |                            |
|-----------------|----------------------------|
| Privacy Masking | Off/On (4 area, Rectangle) |
|-----------------|----------------------------|

#### Audio

|             |                              |
|-------------|------------------------------|
| Compression | G.711A / G.711Mu / AAC / PCM |
|-------------|------------------------------|

#### Intelligence

|                                |   |
|--------------------------------|---|
| IVS                            | Tripwire, Intrusion   |
| Advanced Intelligent Functions | Fire detection & alarm, Cold/Hot spot trace, Human/Vehicle classification |

#### Network

|                     |  |
|---------------------|--|
| Ethernet            | RJ-45  |
| Protocol            | IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x       |
| Interoperability    | ONVIF Profile S & G, API   |
| Streaming Method    | Unicast/Multicast  |
| Max. User Access    | 10 Users/20 Users  |
| Edge Storage        | Micro SD (256GB)<br>Memory status display (Normal / Error / Active / Formatting / Lock),<br>NAS (Network Attached Storage), Local PC for instant recording |
| Web Viewer          | >IE8, <Chrome42, <Firefox42  |
| Management Software | SmartPSS, DSS  |

#### Certifications

|               |   |
|---------------|---|
| Certification | CE (EN 60950: 2000) FCC (FCC Part 15 SubpartB ) |
|---------------|---|

#### Interface

|                 |                   |
|-----------------|-------------------|
| Video Interface | 1 Port (CVBS/BNC) |
| Audio Interface | 1/1 In/Out        |
| RS485           | Support           |
| Alarm           | 2/2 In/Out        |

#### Electrical

|                   |                 |
|-------------------|-----------------|
| Power Supply      | DC 12V/PoE/ePoE |
| Power Consumption | Max. 13W        |

#### Environmental

|                     |   |
|---------------------|---|
| Operating Condition | -40°C ~ +70°C (-40°F ~ +158°F)/Less than 95% RH<br>* Start up should be done at above -40°C (-40°F) |
| Storage Conditions  | -40°C ~ +70°C (-40°F ~ +158°F)/Less than 95% RH   |
| Ingress Protection  | IP67  |

#### Construction

|              |   |
|--------------|---|
| Casing       | Metal                                       |
| Dimensions   | 291mm× 103mm× 97mm (11.46" x 4.06" x 3.82") |
| Net Weight   | 1.5Kg (3.31 lb)                             |
| Gross Weight | 1.9Kg (4.19 lb)                             |

**Ordering Information**

| Type             | Part Number         | Description                |
|------------------|---------------------|----------------------------|
| DHI-TPC-BF5401-T | DHI-TPC-BF5401-TB7  | Thermal:400x300 7.5mm lens |
|                  | DHI-TPC-BF5401-TB13 | Thermal:400x300 13mm lens  |
|                  | DHI-TPC-BF5401-TB25 | Thermal:400x300 25mm lens  |
|                  | DHI-TPC-BF5401-TB35 | Thermal:400x300 35mm lens  |

Note:  
 ① Effective distance values shown are nominal values and should be used as estimates only. Exact value calculations depend on a wide variety of conditions.  
 ② D: Detection Distance  
 ③ R: Recognition Distance  
 ④ I: Identification Distance

**Accessories**

Optional:

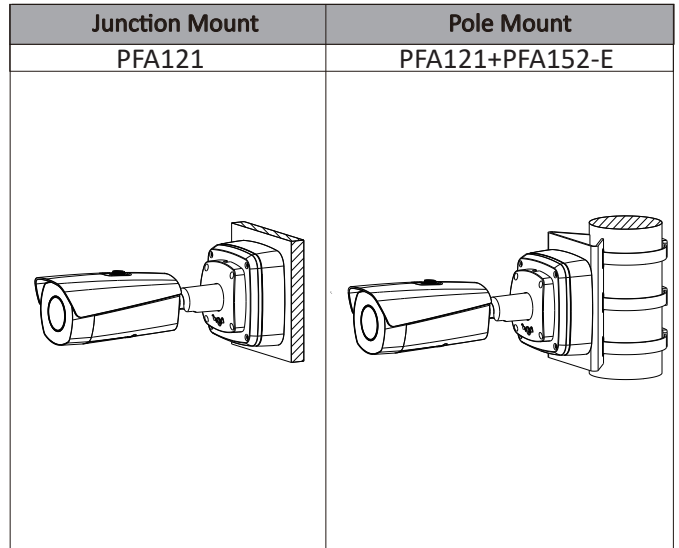


PFA121  
Junction box



PFA152-E  
Pole Mount

**Mounting Type**



**Dimensions(mm)**

