

DH-TPC-BF2221-HTM

Thermal Body Temperature Monitoring Camera



- 256 × 192 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°C to 45°C
- IP67; 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

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|----------------------------------|---|
| Effective Pixels | 256 × 192 |
| Spectral Range | 8 μm –14 μm |
| Thermal Sensitivity (NETD) | $\leq 50\text{mK}@f/1.0$ |
| Focal Length | 7.5mm |
| Field of View | H: 32.4° V: 24.6° |
| 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°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

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| 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 Black & white: 0.001 Lux 0 Lux (IR on) |
| IR Illumination Distance | 50 m (164 ft) |
| IR Illuminator On/Off Control | Auto; Manual |
| Focal Length | 6 mm |
| Aperture | F/2.0 |
| Field of View | H: 52.8° V: 30.3° |
| Focus Mode | Fixed |
| Close Focus Distance | 1.6 m (5.2 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 |

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|--------------------------|-------------|
| Region of Interest (RoI) | Yes |
| Image Flip | 180°/Mirror |
| Exposure Compensation | Yes |

Video and Audio

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|-------------------|---|
| 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

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| 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 64Mbps) |
| Security | Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access |

Certification

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

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

Power

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

Environmet

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

Structure

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|--------------|----------------------------------|
| Dimensions | 365mm×175mm×176mm (With bracket) |
| Net Weight | ≤1.4 kg (3.09 lb) |
| Gross Weight | ≤1.9 Kg (4.19 lb) |

Dimensions (mm[inch])

