

DHI-TPC-HI20

Thermal Handheld Thermographic Camera



- Built with an industry-leading vanadium oxide uncooled focal plane detector, it is highly sensitive and produces high-quality images
- Supports the accurate measuring of temperatures, with a tolerance of less than Max ($\pm 2\text{ }^{\circ}\text{C}$, $\pm 2\%$) and a range of $-20\text{ }^{\circ}\text{C}$ to $+550\text{ }^{\circ}\text{C}$
- Supports SD card storage
- Features 4 pseudo-color modes: Whitehot, Blackhot, Rainbow, and Ironbow
- Uses buzzer alarm when a temperature exceeds the alarm threshold
- Automatically captures images when a temperature exceeds the threshold
- Supports device exception alerts
- Supports image enhancement
- Supports laser Pointer
- Supports cold/Hot spot trace

Series Overview

The HI20 series allows inspectors to check efficiently and find the source of system failures faster than with a IR temperature gun. It is a auxiliary diagnostic tool with non-contact measurement, high accuracy and visualized anomalies on screen.

Technical Specification

Thermal

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| Detector Type | Vanadium Oxide Uncooled Focal Plane Detector |
| Effective Pixels | 256 x 192 |
| Pixel Pitch | 12 μm |
| Spectral Range | 8 μm ~14 μm |
| Thermal Sensitivity (NETD) | $\leq 40\text{ mK}@f/1.0$ |
| Focal Length | 3.5 mm |
| Field of View | H: 37.8°; V: 50.6° |
| Focus Mode | Athermalized |
| Thermal Close Focus Distance | 0.5 m |
| Aperture | F1.0 |
| Noise Reduction | Yes |
| Color Palettes | 4 (Whitehot/Blackhot/Rainbow/Ironbow) |
| Temperature Range | $-20\text{ }^{\circ}\text{C}$ to $+550\text{ }^{\circ}\text{C}$ ($-4\text{ }^{\circ}\text{F}$ to $-1022\text{ }^{\circ}\text{F}$) |
| Temperature Accuracy | Max($\pm 2\text{ }^{\circ}\text{C}$, $\pm 2\%$), Operating Temperature($-20\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$) ($-4\text{ }^{\circ}\text{F}$ to $+122\text{ }^{\circ}\text{F}$) |
| Measurement Distance | 1 m~4 m |

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| Temperature Mode | <ol style="list-style-type: none"> 1. Center spot 2. Max. temp point and Min. temp point 3. Abnormal temperature alarm 4. Color bar display 5. Temperature units can be set as $^{\circ}\text{F}$, $^{\circ}\text{C}$, and K 6. Auto tracking of hot spots and cold spots |
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Video and Audio

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| Video Compression | H.265 |
| Resolution | 480 x 640 |
| Frame Rate | 480 x 640@25 fps |
| Picture Encoding Format | JPEG (480 x 640) |

Video and Audio

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| Sound and Light Alarm | Buzzer alarm |
| Storage | Micro SD card storage (Max. 256 GB) |
| Malfunction Detection | Storage card status detection; storage space detection |
| Laser Aiming | Yes |

Port

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| Alarm Linkage | High temperatures trigger the buzzer alarm and the capturing of snapshots |
| Alarm Event | No SD card; SD card has no space; SD card error; sound alarm |

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| USB | Micro USB |
| Power | |
| Power Supply | 5 V DC; built-in battery |
| Standby Time | ≥ 8 h |
| Charging Time | ≤ 2.5 h |
| Power Consumption | < 1 W |

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| Display | |
| Display Screen Dimensions | 2.4" LCD |
| Resolution | 240 x 320 |

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| Environment | |
| Operating Temperature | -20 °C to +50 °C |
| Operating Humidity | ≤ 90% |
| Storage Temperature | -20 °C to +60 °C |

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| Physical Characteristics | |
| Protection | IP54; 2 m (6.56 ft) (naked camera) |
| Product Dimensions | 192.4 mm × 62.5 mm × 72.2 mm (7.6" × 2.5" × 2.8") (L × W × H) |
| Packaging Dimensions | 239 mm × 147 mm × 109 mm (9.4" × 7.0" × 4.3") (L × W × H) |
| Net Weight | ≤ 350 g |
| Gross Weight | ≤ 1 kg |
| Power Adapter | Included |
| Lens | Included |

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| Certification | |
| Certifications | CE: EN 55032:2015; EN 61000-3-3:2013+A1:2019; EN 50130-4:2011/A1:2014; EN55024:2010/A1:2015; EN55035:2017 FCC: CFR 47 FCC Part 15 subpart B, 2019; ANSI C63.4-2014 UL: IEC 62368-1:2014 (Second Edition) |

| Ordering Information | | |
|----------------------|--------------|-------------|
| Type | Model | Description |
| Thermal Camera | DHI-TPC-HI20 | 3.5 mm |

Dimensions (mm[inch])

