**a**hua
TECHNOLOGY

# 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 (±2 °C, ±2%) and a range of −20 °C to +550 °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

| | |
|---|---|
| Detector Type | Vanadium Oxide Uncooled Focal Plane Detector |
| Effective Pixels | 256 × 192 |
| Pixel Pitch | 12 µm |
| Spectral Range | 8 µm~14 µm |
| Thermal Sensitivity (NETD) | ≤40 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 °C to +550 °C (−4 °F to −1022 °F) |
| Temperature Accuracy | Max(±2 °C, ±2%), Operating Temperature(−20°C to +50 °C) (−4 °F to +122 °F) |
| Measurement Distance | 1 m~4 m |

| | |
|---|---|
| Temperature Mode | 1. Center spot<br>2. Max. temp point and Min. temp point<br>3. Abnormal temperature alarm<br>4. Color bar display<br>5. Temperature units can be set as °F, °C, and K<br>6. Auto tracking of hot spots and cold spots |

### Video and Audio

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

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

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

| 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 |

## Dispplay

| Display Screen Dimensions | 2.4'LCD |
|---|---|
| Resolution | 240 x 320 |

## Environment

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

## 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 |

## 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<br>FCC: CFR 47 FCC Part 15 subpart B, 2019; ANSI C63.4-2014<br>UL: IEC 62368-1:2014 (Second Edition) |
|---|---|

## Dimensions (mm[inch])



73.4[2.9]
192.4[7.6]
62.5[2.5]
1/4-20X9UNC
72.2[2.8]
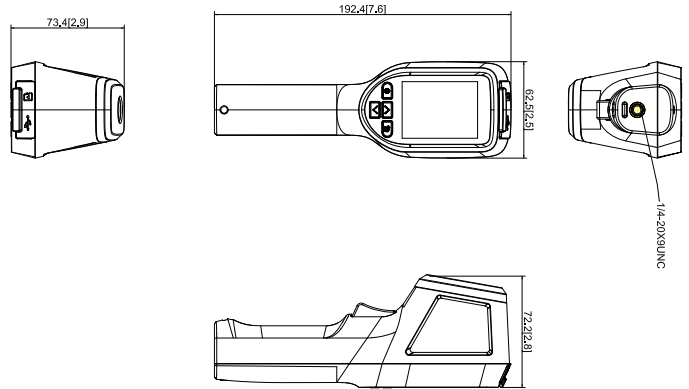
## Ordering Information

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