

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

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

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

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

Display	
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 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])

