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 ℃, ±2%) and a range of –20 ℃ to +550 ℃
- 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)	≤50 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 2. Max. temp point and Min. temp point 3. Abnormal temperature alarm 4. Color bar display 5. Temperature units can be set as °F, °C, and K 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 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])