

SP100H Handheld Thermal Camera



The HIKMICRO SP100H high-performance handheld thermal camera is an excellent choice for industrial, predictive, oil and gas, and utility maintenance inspections. It features a high-sensitivity HIKMICRO VOx detector (NETD < 20 mK) with a resolution of 1040 × 832 and can measure temperatures up to 2200°C. This flexible and ergonomic thermal imager includes an electronic viewfinder and a 180° rotating lens, simplifying long outdoor inspections. Advanced features such as GPS and compass annotations, continuous digital zoom, and 1-Tap level and span make it easy for professionals to survey equipment and detect malfunctions. With the HIKMICRO Viewer App or HIKMICRO Analyzer software, users can transfer, analyze, and share images, as well as generate reports for free.

• Features

- Thermal resolution: 1040 × 832 (865 280 pixels), NETD: < 20 mK (@ 30°C, F#=1.0)
- Temperature measurement range: -40°C to 2200°C
- Accuracy: Max. ±1°C : 0 to 100°C; ±1%: 100 to 150°C
- The 90° rotating screen and the 180° rotating lens design
- 1024 × 768 OLED electronic viewfinder and auto-brightness 5.1-inch color LCD display
- 1.x to 12.x continuous digital zoom
- Manual, automatic, and 1-Tap Level and Span
- GPS & compass annotation functions
- 30 Hz image frequency
- Up to 4 hours continuous running

• Specification

| Infrared Image | |
|---|---|
| IR Resolution | 1040 × 832 (865,280 pixels) |
| SuperIR | Yes, on captured images |
| NETD | < 20 mK (@ 30°C, F#=1.0) |
| Image Frequency | 30 Hz |
| Detector Pitch | 12 μm |
| Spectral Range | 7.5 to 14 μm |
| Focal Length | L8: 112.2 mm; L12: 72.9 mm; L25: 35 mm; L50: 17.6 mm |
| F-number | L8: F1.3; L12: F1.2; L25: F1.1; L50: F1.1 |
| Field of View (FOV) | L8: 7.9° × 6.3°; L12: 12° × 9.6°; L25: 25° × 20°; L50: 50° × 40° |
| Spatial Resolution (IFOV) | L8: 0.13 mrad; L12: 0.20 mrad; L25: 0.42 mrad; L50: 0.84 mrad |
| Min. Focus Distance | L8: 5m (16.4 ft); L12: 1.65m (5.41 ft); L25: 0.3m (0.98 ft); L50: 0.2m (0.66 ft) |
| Focus Mode | Laser Assisted AF/Continuous AF/AF/Manual Focus/Touch AF |
| Image Display | |
| Visual Camera | 4096 × 3036 (13 MP) |
| Display | 1920 × 1080 Resolution, 5.1" OLED Touch Screen, Lv 360 Cd/m ² |
| Screen Brightness | Manual/Auto |
| Viewfinder | 1024 × 768 pixels OLED |
| Digital Zoom | 1.× to 12.× continuous |
| Color Palettes | White Hot, Black Hot, Rainbow, Ironbow, Red Hot, Fusion, Rain, Blue Red |
| Focus Mode Palette | Above/Below/Interval |
| Color Alarm | Above/Below/Interval/Insulation/Condensation |
| Image Modes | Thermal/Visual/Fusion/PIP/Blending |
| Measurement and Analysis | |
| Object Temperature Range | Range 1: -40~150°C Range 2: 0~650°C Range 3: 300~2200°C |
| Accuracy | Range 1: ±2°C for -40 to 0°C, ±1°C for 0 to 100°C, ±1% for 100 to 150°C Range 2: ±2°C for 0 to 100°C, ±2% for 100 to 650°C Range 3: ±2% for 300 to 2200°C |
| Measurement Tools | Center Spot, Hot Spot, Cold Spot User-definable: Delta T, 10 spots, 1 line, 5 rectangles, and 5 circles |
| Level and Span Mode | Auto/Manual/1-Tap Touch-Screen |
| Inspection Route | Yes |
| SuperScene+ | Electrical Panel, PCB Inspection |
| Data Storage and Communication | |
| Image Storage Capacity | Approx. 50,000 Images |
| Annotations | Voice note: max. 60 seconds; Text note: max. 200 characters; QR Code note; Picture note; Tag note; Sketch |
| Video Storage Capacity | MP4 video max. 100h; Radiometric video max. 13h |
| Video File Format | MP4 video and radiometric video |
| Image Format | Radiometric JPEG |
| Radiometric Infrared-Video Streaming (Compressed) | Over UVC, Wi-Fi |

| Extendable Memory Card | Extendable 128 GB SD Card |
|---------------------------|---|
| General | |
| Wi-Fi | 802.11 b/g/n (2.4 GHz and 5 GHz) |
| Bluetooth | Bluetooth 4.2 |
| USB Interface | USB Type-C |
| HDMI Interface | HDMI-D |
| LED Light | Yes |
| Laser Pointer | Yes |
| Laser Distance Meter | Indoor distance: 50 m (164 ft); Outdoor distance: 15 m (49 ft). |
| Laser | Yes, Class II, Wavelength: 635 nm; Power:< 1 mW |
| Battery Type | Interchangeable and rechargeable Li-ion battery |
| GPS & Compass | Yes |
| Battery Operating Time | Approx. 4 hours |
| Battery Charging Time | Approx. 2.5 hours fully charged |
| Power Saving Mode | Yes |
| Programmable Buttons | 2 |
| Protection Level | IP54, IEC 60529 |
| Drop Test Height | 1 m (3.28 ft), IEC 60068-2-31 |
| Safety | IEC 61010-1 |
| EMC | EN 301 489-1, EN 301 489-17, EN IEC 61000-6-2, EN IEC 61000-6-3, EN 61326-1 |
| Vibration | 2 g, IEC 60068-2-6 |
| Shock | 25 g, IEC 60068-2-27 |
| Working Temperature Range | -20°C to 50°C (-4°F to 122°F) |
| Storage Temperature Range | -20°C to 60°C (-4°F to 140°F) |
| Relative Humidity | < 95% non-condensing |
| Weight | Approx. 1550 g (3.42 lb) (Without lens) Approx. 1700 g (3.74 lb) (With L25 lens) |
| Dimension | 220.5 × 151.9 × 88.1 mm (8.68 × 5.98 × 3.47 in) (Without lens) |
| Tripod Mounting | UNC ¼"-20 |
| Warranty | 3 years for the full product, 10 years for the detector, and 2 years for the battery. |

▪ Available Model

HM-TP9AH-W/W-SP100H-L12/50

HM-TP9AH-W/W-SP100H-L12/25

HM-TP9AH-W/W-SP100H-L8/25

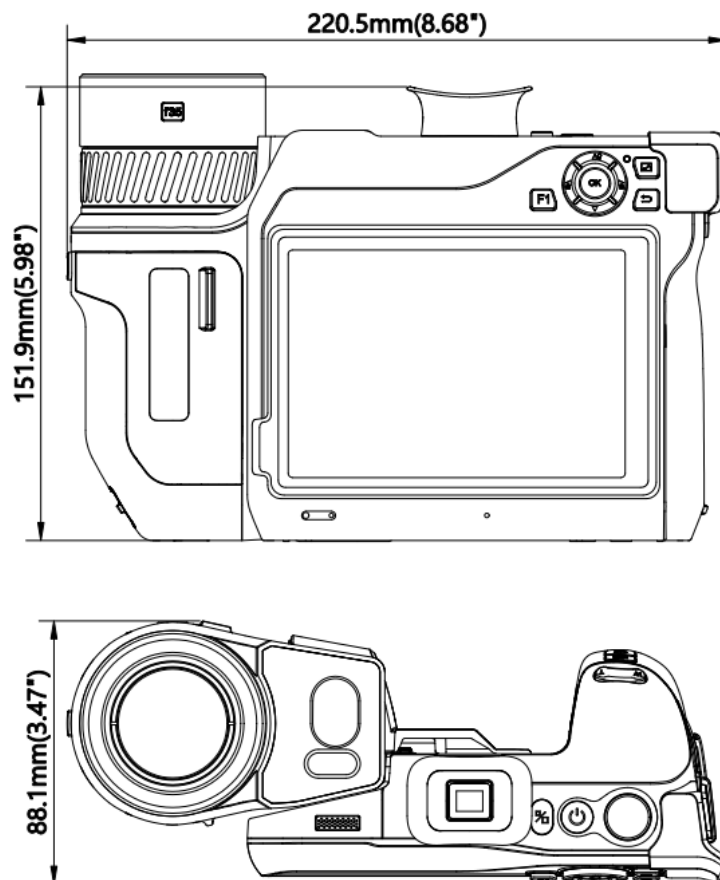
HM-TP9AH-W/W-SP100H-L8/12/25

HM-TP9AH-W/W-SP100H-L25/50

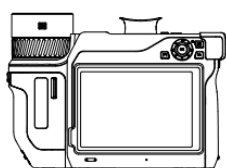
HM-TP9AH-W/W-SP100H-L50

HM-TP9AH-W/W-SP100H-L25

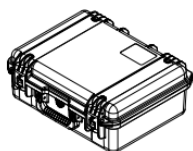
▪ Dimension



▪ Packaging List



Camera(x1)



Hard Carrying Case(x1)



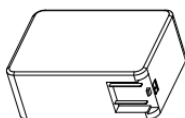
QSG(x1)



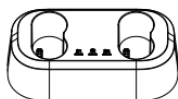
Non-Dust Cloth(x1)



Lens Caps(x1)



Adapter(x1)



Charging Base(x1)



USB Cable(x2)



Wrist Strap(x1)



Adapter Plug(x4)



Battery(x2)



HDMI Cable(x1)



Neck Strap(x1)

- **Accessory**
- **Optional**

HM-SP01-POUCH
M/G/SP Series Pouch



HM-7250DC
SP Series Battery



HM-20322ZC
SP Series Battery
Charger



▪ **COMPLIANCE NOTICE:**

The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.



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*Note: Specifications are subject to change without notice. For the current specs,
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