SP40H
Handheld Thermal Camera

The HIKMICRO SP40H high-performance handheld thermal camera is ideal for industrial, predictive, oil and gas, and utility maintenance inspections. HIKMICRO SP40H has a high sensitivity (NETD < 30 mK) and high resolution (480 × 360) HIKMICRO VOx detector, and the temperature calibration is up to 2200°C. Advanced features help thermal imaging professionals to easily survey equipment and find signs of malfunction, such as GPS and compass annotations, continuous digital zoom, and 1-Tap level and span. Connect HIKMICRO Viewer App or HIKMICRO Analyzer software to transfer, analyze, and share pictures, and generate reports for free.

Key Features

- Thermal resolution: 480 × 360 (172,800 pixels),NETD : < 30 mK (@ 25 °C,F#=1.0)
- Temperature measurement range : -40°C to 2200°C (-40°F to 3992°F)
- Accuracy: Max. (±1°C (±1.8°F): 0 to 100°C (32 to 212°F); ±1%: 100 to 150°C (212 to 302°F))
- The 90° rotating screen and the 180° rotating lens design
- 1024 x 768 OLED electronic viewfinder and auto-brightness 5-inch color LCD display
- 1.x to 12.x continuous digital zoom
- Manual, automatic, and 1-Tap Level and Span
- 30 Hz image frequency
- Up to 4 hours continuous running

▪ Specification

Infrared Image

IR Resolution	480 × 360 (172,800 pixels)
SuperIR	960 x 720 (691,200 pixels)
NETD	< 30 mK (@ 25 °C, F#=1.0)
Image Frequency	30 Hz
Spectral Range	7.5 to 14 μm
Detector Pitch	17 μm
F-number	L6: F1.2; L9: F1.1; L19: F1.0; L37: F1.0
Focal Length	L6: 77.4 mm; L9: 51.4 mm; L19: 25 mm; L37: 12.6 mm
Field of View (FOV)	L6: 6° × 4.5°; L9: 9° × 6.8°; L19: 18.7° × 14°; L37: 37.3° × 27.8°
Spatial Resolution (IFOV)	L6: 0.22 mrad; L9: 0.33 mrad; L19: 0.68 mrad; L37: 1.35 mrad
Min. Focus Distance	L6: 2 m (6.56 ft); L9: 1 m (3.3 ft); L19: 0.2 m (0.65 ft); L37: 0.2 m (0.65 ft)
Focus Mode	Laser Assisted AF/Continuous AF/AF/Manual Focus/Touch AF
Focus Speed	Approx. 1 second

Image Display

Visual Camera	3264 × 2448 (8 MP)
Display	1280 × 720 Resolution, 5" LCD Touch Screen
Screen Brightness	Manual/Auto
Digital Zoom	1.x to 12.x 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
Image Modes	Thermal/Visual/Fusion/PIP/Blending

Measurement and Analysis

Object Temperature Range	-40°C to 2200°C (-40°F to 3992°F)
Accuracy	±1°C (±1.8°F): 0 to 100°C (32 to 212°F); ±1%: 100 to 150°C (212 to 302°F); ±2°C (±3.6°F): -40 to 0°C (-40 to 32°F); ±2%: 150 to 2200°C (302 to 3992°F)
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

Data Storage and Communication

Storage Media	Removable 64 GB SD Card
Image Storage Capacity	Approx. 60,000 Images
Annotations	Voice note: max. 60 seconds; Text note: max. 200 characters
Video Storage Capacity	Approx. 64 hours
Video File Format	MP4 video and radiometric video
Image Format	Radiometric JPEG
Radiometric Infrared-Video Streaming (Compressed)	Over UVC, Wi-Fi

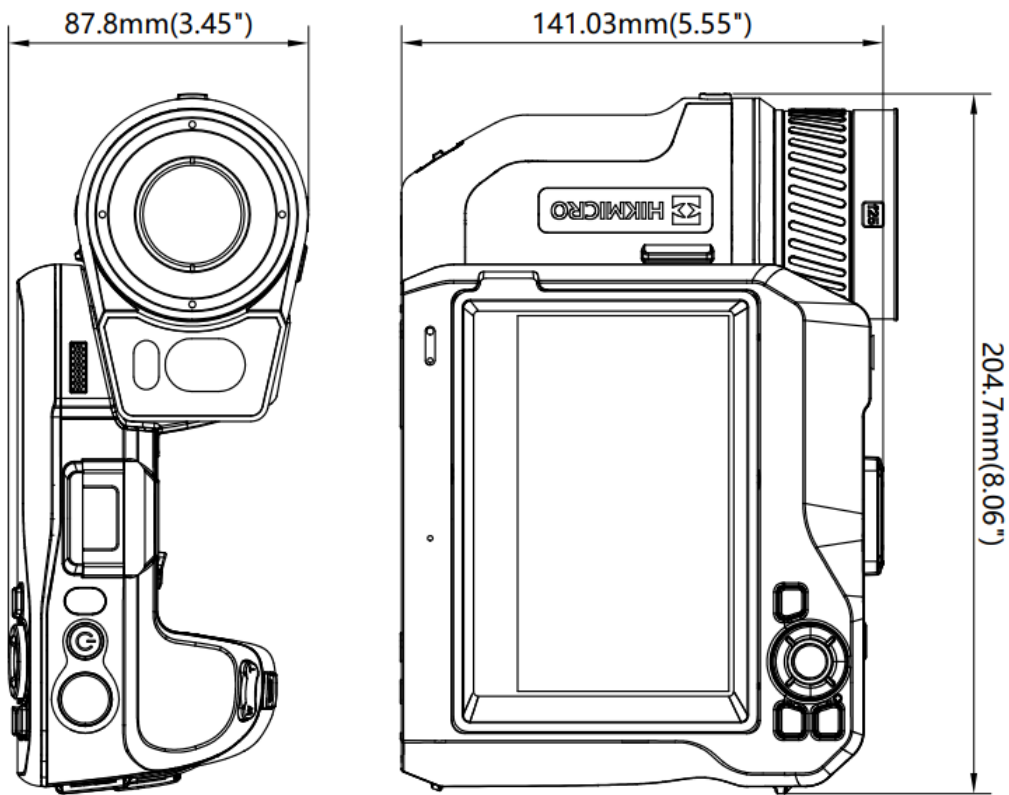| General	
Wi-Fi	802.11 b/g/n (2.4 GHz and 5 GHz)
Bluetooth	Bluetooth 4.2
USB Interface	USB Type-C
HDMI Interface	HDMI-D
Laser Pointer	Yes
Laser	Yes, Class II, Wavelength: 635 nm; Power: <1 mW
Laser Distance Meter	Indoor distance: 50 m (164 ft); Outdoor distance: 10 m (33 ft).
GPS & Compass	Yes
Battery Type	Interchangeable and rechargeable Li-ion battery
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 61000-6-4, 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. 1451 g (3.2 lb)
Dimension	204.7 × 141.03 × 87.8 mm (8.06 × 5.55 × 3.45 in)
Tripod Mounting	UNC ¼"-20
LED Light	Yes

▪ Available Model

HM-TP94H-Q/W-SP40H-L9

HM-TP94H-Q/W-SP40H-L37

HM-TP94H-Q/W-SP40H-L19

HM-TP94H-Q/W-SP40H-L6

Dimension

87.8mm(3.45")

141.03mm(5.55")

204.7mm(8.06")

Optional Accessory

HM-20322ZC	HM-7250DC	HM-SP620-MACRO
HM-SP605-LENS	HM-SP610-LENS	

HM-SP620-LENS	HM-SP630-LENS	HM-SP01-POUCH
HM-SP650-MACRO		

HIKMICRO

FULL PRODUCT **3** YEARS ★

DETECTOR **10** YEARS ★

BATTERY **2** YEARS ★