

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. ($\pm 1^{\circ}\text{C}$ ($\pm 1.8^{\circ}\text{F}$): 0 to 100°C (32 to 212°F); $\pm 1\%$: 100 to 150°C (212 to 302°F))
- The 90° rotating screen and the 180° rotating lens design
- 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 × 720 (691,200 pixels)
NETD	< 30 mK (@ 25 °C, F#=1.0)
Image Frequency	30 Hz
Detector Pitch	17 μm
Spectral Range	7.5 to 14 μm
Focal Length	L6: 77.4 mm; L9: 51.4 mm; L19: 25.6 mm; L37: 12.6 mm
F-number	L6: F1.2; L9: F1.1; L19: F1.0; L37: F1.0
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: 0.66 mrad; L37: 1.35 mrad
Min. Focus Distance	L6: 2 m (6.56 ft); L9: 1 m (3.3 ft); L19: 0.15 m (0.49 ft); L37: 0.15 m (0.49 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 128 GB SD Card
Image Storage Capacity	Approx. 120,000 Images
Annotations	Voice note: max. 60 seconds; Text note: max. 200 characters
Video Storage Capacity	Approx. 500 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
Laser Pointer	Yes
HDMI Interface	HDMI-D
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	210.1 × 141.03 × 87.8 mm (8.27 × 5.55 × 3.45 in)
Tripod Mounting	UNC ¼" -20
LED Light	Yes
Warranty	3 years for the full product, 10 years for the detector, and 2 years for the battery.

▪ Available Model

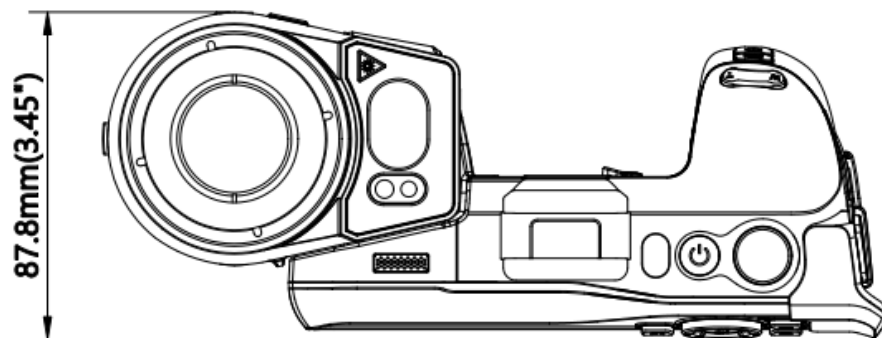
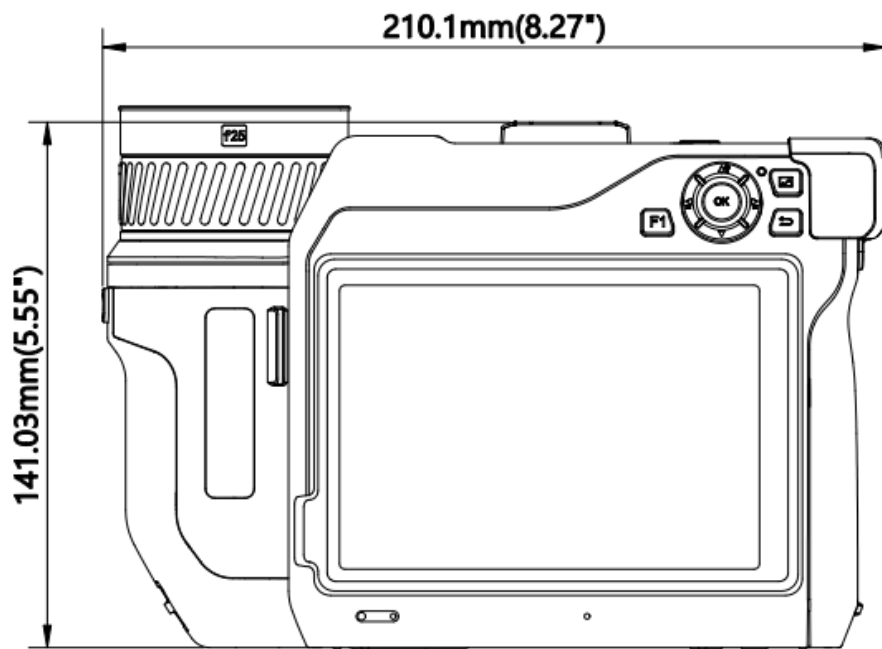
HM-TP94H-Q/W-SP40H-L9

HM-TP94H-Q/W-SP40H-L37

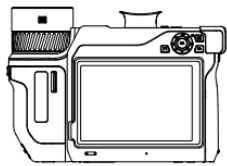
HM-TP94H-Q/W-SP40H-L19

HM-TP94H-Q/W-SP40H-L6

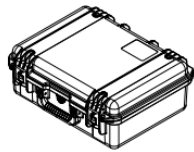
▪Dimension



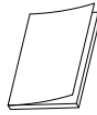
▪ Packaging



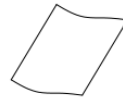
Camera(x1)



Hard Carrying Case(x1)



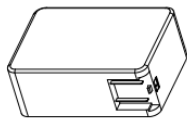
QSG(x1)



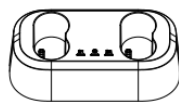
Non-Dust Cloth(x1)



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-20322ZC
SP Series Battery
Charger



HM-7250DC
SP Series Battery



HM-SP620-MACRO
SP Series Macro Lens



HM-SP605-LENS
SP Series 0.5X Wide
Angle Lens



HM-SP610-LENS
SP Series 1X
Telephoto Lens



HM-SP620-LENS
SP Series 2X
Telephoto Lens



HM-SP630-LENS
SP Series 3.3X
Telephoto Lens



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




HM-SP650-MACRO
SP Series Macro Lens
50 μm



HM-AHBR01
SP Series Desktop
Stand Bracket





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*Note: Specifications are subject to change without notice. For the current specs,
please go to www.hikmicrotech.com