

### HM-TP96-Q/W-SP60-L8/25

## Handheld Thermography Camera



The HIKMICRO SP60 high-performance handheld thermal imaging camera is ideal for industrial, predictive, oil and gas, and utility maintenance inspections.

HIKMICRO SP60 has a high sensitivity (NETD < 30 mK) and high resolution ( $640 \times 480$ ) HIKMICRO VOx detector, and the temperature calibration is up to  $650^{\circ}$ C. This flexible and ergonomic thermal imager provides an electronic viewfinder and a  $180^{\circ}$  rotating lens, making long-day outdoor inspections easier. 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: 640 × 480 (307,200 pixels), NETD: < 30 mK (@25°C, F# = 1.0)
- Temperature measurement range: -20°C to 650°C (-4°F to 1202°F)
- Accuracy: Max. (± 2°C/3.6°F, ± 2%)
- The 90° rotating screen and the 180° rotating lens design
- 1024 × 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
- Manual focus, continuous autofocus, autofocus, and laser-assisted focus
- GPS, BDS, GLONASS or GALILEO & compass annotation functions
- 25 Hz image frequency
- 8 MP optical camera
- Up to 4 hours continuous running

# Specification

THERMAL MODULE		
DETECTOR TYPE	Vanadium Oxide Uncooled Focal Plane Array	
IR RESOLUTION	640 × 480 (307,200 pixels)	
DETECTOR PITCH	17 µm	
SPECTRAL RANGE	8 to 14 µm	
NETD	< 0.03°C (30 mK) at 25°C (77°F) ambient temperature, F# = 1.0	
FOV (FIELD OF VIEW)	L8: 8° H × 6° V; L25: 24.8° H × 18.7° V	
IMAGE FREQUENCY	25 Hz	
FOCAL LENGTH	L8: 77.4 mm; L25: 25.0 mm	
FOCUS	Continuous Autofocus/Autofocus/Manual Focus/Laser Assisted Focus	
FOCUS SPEED	Approx. 1 second	
MINIMUM FOCUS DISTANCE	L8: 2 m; L25: 0.2 m	
INTERCHANGEABLE LENS OPTIONS	Yes	
LENS RECOGNITION	Automatic	
IFOV (SPATIAL RESOLUTION)	L8: 0.22 mrad; L25: 0.68 mrad	
F-NUMBER	L8: F1.2; L25: F1.0	
OPTICAL MODULE		
BUILT-IN VISUAL CAMERA	3264 × 2448 (8 MP)	
FOCUS	Fixed	
FOV	65° H × 51° V	
PICTURE RESOLUTION	Configurable: 2 MP, 5 MP, 8 MP	
VIDEO RESOLUTION	960 × 720	
IMAGE DISPLAY		
DISPLAY	1280 × 720 Resolution, 5" LCD Touch Screen	
SCREEN BRIGHTNESS	Manual/Automatically adjust	
LENS ROTATION	180°	
DISPLAY ROTATION	90°	
VIEWFINDER	Built-in 1024 × 768 pixels	
DIGITAL ZOOM	1.x to 12.x continuous	
COLOR PALETTES	7: White Hot, Black Hot, Rainbow, Ironbow, Red Hot, Fusion, Rain	
IMAGE MODES	Thermal/Optical/Fusion/PIP	

PIP	Resizable and movable infrared area on the visual image	
FUSION	Thermal image with visual camera details	
	-	
LEVEL/SPAN	Auto/Manual/1-Tap Touch-Screen	
MEASUREMENT AND ANALYSIS		
OBJECT TEMPERATURE RANGE	-20°C to 650°C (-4°F to 1202°F)	
ACCURACY	Max. (± 2°C/3.6°F, ± 2%)	
MEASUREMENT PRESETS	Center Spot, Hot Spot, Cold Spot, Off	
USER-DEFINED MEASUREMENT POINTS	10 points	
USER-DEFINED MEASUREMENT LINES	1 line with Max./Min./Avg. temperature	
USER-DEFINED MEASUREMENT AREAS	3 areas with Max./Min./Avg. temperature	
HIGH TEMPERATURE ALARM	Audible/visual alarm of above temperature threshold, User-defined temperature threshold	
ON-CAMERA EMISSIVITY CORRECTION	Variable from 0.01 to 1.0 or selected from the materials list	
ON-CAMERA REFLECTED TEMPERATURE COMPENSATION	Automatic, based on the input of the reflected temperature	
ON-CAMERA TRANSMISSION	Automatic, based on the inputs for distance and humidity	
CORRECTION	Automatic, based on the inputs for distance and numbers	
CORRECTION  DATA STORAGE	Automatic, based on the inputs for distance and numbers	
DATA STORAGE	Default Storage: Removable Card (64 GB);	
DATA STORAGE	Default Storage: Removable Card (64 GB);	
DATA STORAGE STORAGE MEDIA	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB) Radiometric image with measurement data included	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT  VOICE NOTE	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT  VOICE NOTE  TEXT NOTE	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT  VOICE NOTE	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters  Approx. 64 h (The size of a one-minute video is about 15 MB to 20 MB)	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT  VOICE NOTE  TEXT NOTE	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT  VOICE NOTE  TEXT NOTE  VIDEO STORAGE CAPACITY	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters  Approx. 64 h (The size of a one-minute video is about 15 MB to 20 MB)	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT  VOICE NOTE  TEXT NOTE  VIDEO STORAGE CAPACITY  VIDEO FILE FORMAT	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters  Approx. 64 h (The size of a one-minute video is about 15 MB to 20 MB)	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT  VOICE NOTE  TEXT NOTE  VIDEO STORAGE CAPACITY  VIDEO FILE FORMAT  SOFTWARE	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters  Approx. 64 h (The size of a one-minute video is about 15 MB to 20 MB)  Standard MP4 non-radiometric video	
STORAGE MEDIA IMAGE STORAGE CAPACITY IMAGE FILE FORMAT  VOICE NOTE TEXT NOTE VIDEO STORAGE CAPACITY VIDEO FILE FORMAT  SOFTWARE PC SOFTWARE	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters  Approx. 64 h (The size of a one-minute video is about 15 MB to 20 MB)  Standard MP4 non-radiometric video	
STORAGE MEDIA IMAGE STORAGE CAPACITY IMAGE FILE FORMAT  VOICE NOTE TEXT NOTE  VIDEO STORAGE CAPACITY  VIDEO FILE FORMAT  SOFTWARE  PC SOFTWARE  APP	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters  Approx. 64 h (The size of a one-minute video is about 15 MB to 20 MB)  Standard MP4 non-radiometric video  HIKMICRO Analyzer  HIKMICRO Viewer App	
STORAGE MEDIA IMAGE STORAGE CAPACITY IMAGE FILE FORMAT  VOICE NOTE TEXT NOTE VIDEO STORAGE CAPACITY VIDEO FILE FORMAT  SOFTWARE PC SOFTWARE APP CAST SCREEN	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters  Approx. 64 h (The size of a one-minute video is about 15 MB to 20 MB)  Standard MP4 non-radiometric video  HIKMICRO Analyzer  HIKMICRO Viewer App	
DATA STORAGE  STORAGE MEDIA  IMAGE STORAGE CAPACITY  IMAGE FILE FORMAT  VOICE NOTE  TEXT NOTE  VIDEO STORAGE CAPACITY  VIDEO FILE FORMAT  SOFTWARE  PC SOFTWARE  APP  CAST SCREEN  BATTERY	Default Storage: Removable Card (64 GB); Max. Storage Capacity: 128 GB  Approx. 60,000 images (The size of a single image is about 900 KB to 1.3 MB)  Radiometric image with measurement data included  JPEG image without measurement data included  Max. 60 seconds  Max. 200 characters  Approx. 64 h (The size of a one-minute video is about 15 MB to 20 MB)  Standard MP4 non-radiometric video  HIKMICRO Analyzer  HIKMICRO Viewer App  UVC Alarm Client	

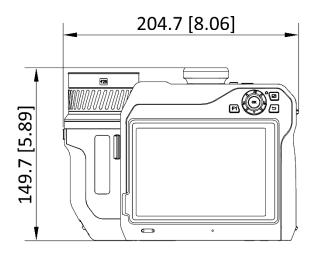
BATTERY OPERATING TIME	4 hours continuous running per battery (actual life varies depending on settings and usage)
BATTERY CHARGING TIME	2.5 h to full charge
BATTERY CHARGING SYSTEM	Two-bay battery charger or in-imager charging, fast charging
AC OPERATION	AC operation with included power supply (100 VAC to 240 VAC, 50/60 Hz)
GENERAL	
WI-FI	802.11 b/g/n (2.4 GHz)
BLUETOOTH	Bluetooth 4.2
USB INTERFACE	USB Type-C
HDMI INTERFACE	HDMI-D
SD CARD INTERFACE	64 GB SD card
LED LIGHT (TORCH)	Yes
LASER POINTER	Yes
LASER DISTANCE METER	Indoor distance: 50 m (164 ft); Outdoor distance: 10 m (33 ft).
LASER TYPE	Class II, Wavelength: 635 nm; Power: < 1 mW
GEOLOCATION	Location data automatically added to every image from the built-in GPS, BDS, GLONASS or GALILEO
COMPASS	Camera direction automatically added to every image
CARRYING CASE	Yes
PROTECTION LEVEL	IP54 (protected against dust, limited ingress; protection against water spray from all directions)
WARRANTY	3 years for whole product, 10 years for detector, and 2 years for battery
RECOMMENDED CALIBRATION CYCLE	1 year (assumes normal operation and normal aging)
SAFETY	IEC 61010-1: Overvoltage Category II, Pollution Degree 2
ELECTROMAGNETIC COMPATIBILITY  AUSTRALIAN RCM	EN55032: 2015+A11: 2020 EN50130-4: 2011+A1: 2014 EN61000-3-3: 2013 EN 61010-1: 2010 EN55032: 2015+A11: 2020 EN50130-4: 2011+A1: 2014
	EN61000-3-3: 2013
ROHS COMPLIANT	Yes
VIBRATION	0.03 g2/Hz (3.8 g), 2.5 g IEC 60068-2-6
SHOCK	25 g, IEC 68-2-29
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

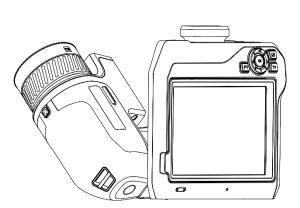
WEIGHT	Approx. 1590 g (3.51 lb)
DIMENSION	204.7 mm × 149.7 mm × 87.8 mm (8.06" × 5.89" × 3.46")
TRIPOD MOUNTING	UNC 1/4"-20
LANGUAGE	
LANGUAGE	21 Languages English, German, French, Spanish (Spain), Portuguese (Portugal), Italian, Czech, Slovak, Polish, Hungarian, Romanian, Dutch, Danish, Norwegian, Finnish, Swedish, Russian, Turkish, Japanese, Korean, Chinese (Traditional)

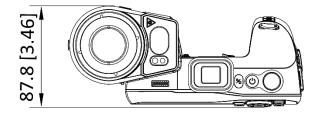
## Available Model

HM-TP96-Q/W-SP60-L8/25

## Dimension

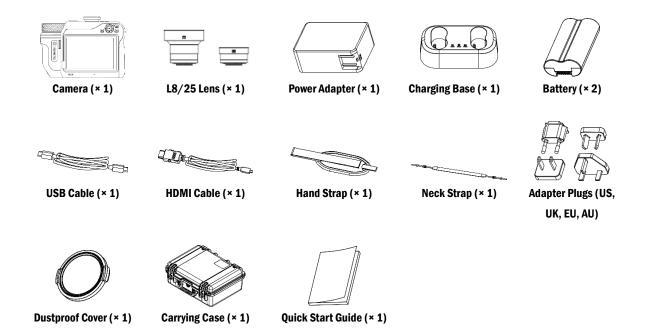






Unit: mm [inch]

## **Packing List**



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.











