FP31
Handheld Thermal Imager



The FP Series is a compact thermal imaging camera designed for firefighting, search and rescue, and other emergency response applications. It delivers clear thermal images and high thermal sensitivity, helping users quickly identify heat sources, detect potential hazards, and locate targets in smoke-filled or low-visibility environments. Multiple color palettes support different operational needs. The FP Series is also hazardous-location certified for use in potentially explosive gas and dust atmospheres.

▪ Features

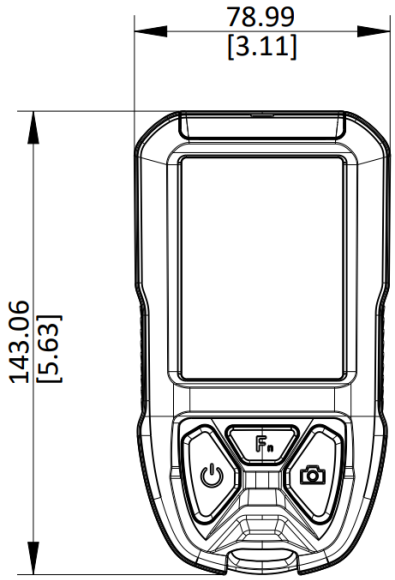
- Thermal resolution: 384 x 288 (110,592 pixels)
- NETD : < 30 mK (@ 25°C, F#=1.0)
- Temperature measurement range : -20°C to 650°C
- Start up time: 6 second (with IR image), 8 second (with OSD)
- 25 Hz image frequency
- 3.2" LCD screen display
- Image enhancement technology on live view and captured images

▪ Specification

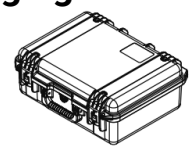
Infrared Image	
IR Resolution	384 x 288 (110,592 pixels)
NETD	< 30 mK (@ 25°C, F#=1.0)
Image Frequency	25 Hz
Detector Pitch	12 μm
Spectral Range	7.5 to 14 μm
Focal Length	6.7 mm
F-number	F0.9
Field of View (FOV)	40°×29.8°
Spatial Resolution (IFOV)	1.79 mrad
Min. Focus Distance	0.5 m (1.64 ft)
Focus Mode	Focus Free
Image Display	
Display	640 × 480 Resolution, 3.2" LCD Screen
Digital Zoom	1x, 2x, 4x
Color Palettes	Basic, Smooth, White Hot, Fire Detection, Rescue, Hot Area, Cold Area, Building
Image Modes	Thermal/Fusion
Visual Camera	3264×2448 (8MP)
Measurement and Analysis	
Object Temperature Range	Range -20°C to 150°C Range 0°C to 650°C
Measurement Tools	Center Spot, Hot Spot, Cold Spot
Data Storage and Communication	
Storage Media	Built-in 128 GB flash memory
Image Storage Capacity	Approx. 327800 Images
Video Storage Capacity	Approx. 137 h
Video File Format	MP4
General	
USB Interface	USB Type-C
LED Light	Yes
Battery Type	Rechargeable Li-ion battery
Wi-Fi	Yes
Laser Pointer	Yes
Laser	Yes, Class II, Wavelength: 650nm; Power: <1mW
Laser Distance Meter	Yes
Battery Operating Time	Approx. 4 hours
Battery Charging Time	Approx. 3 hours via USB; 4 hours with battery charger
Protection Level	IP67, IEC 60529
Safety	EN 62368
Drop Test Height	2 m, IEC 60068-2-31
Vibration	2 g, IEC 60068-2-6
EMC	EN 301 489-1, EN 301 489-17, EN IEC 61000-6-2, EN IEC 61000-6-3

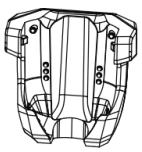
Shock	25 g, IEC 60068-2-27
Working Temperature Range	-10°C to 55°C (default settings) 85°C, 30min 150°C, 10min 260°C, 5min
Relative Humidity	IEC 60068-2-30, 24 hours, 95% relative humidity, 25–40°C, 2 cycles
Storage Temperature Range	-20°C to 60°C
Weight	Approx. 420g (0.93 lb)
Dimension	52.7×143×79 mm (2.1 × 5.6 × 3.1 in)
ATEX / IECEx Certificate Type	ATEX: II 3 G Ex ic op is IIC T5 Gc, II 3 D Ex ic op is IIIC T100°C Dc IECEx: Ex ic op is IIC T5 Gc, Ex ic op is IIIC T100°C Dc

▪ Dimension

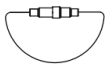


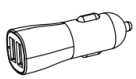
▪ Packaging List


Carrying Case(x1)


Charging Base(x1)

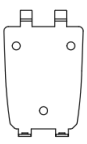

Imager Quick Start Guide(x1)


In-line Fuse(x1)

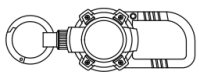

Car Cigarette Lighter(x1)


USB Cable(x1)


M5x16 Screws (x3)


Metal Bracket(x1)


Neck Strap(x1)


Retractable Lanyard(x1)


Patch Cable(x1)


M2.5x6 Screws (x2)

▪ Accessory

Optional

AHCH02-4161
In-truck 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, please go to www.hikmicrotech.com