GUIDE

Refresh the temperature record at 30Hz

Hammer Series Intelligent Thermal Camera

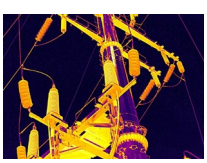
Introduction

With a built-in self-developed high-sensitivity IR detector Hammer Series, the high-precision thermal camera designed specifically for the industrial field helps users intuitively view high-definition images and temperature details of the target, with the classic "hammer" shape. 30Hz infrared frame rate for fast and accurate access to more temperature data of moving targets, far beyond the same level of products.

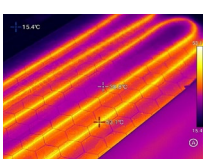
Features

- The new generation of self-developed IR detectors
- ASIC algorithms for pixel point details and hidden hazards
- A visible light camera and dual illumination for easy location of faults
- Up to 30Hz IR video frame rate for temperature analysis by the screenshot
- IP54 waterproof and dustproof and 2m drop resistance with military-grade quality
- OTA online upgrades to keep the device in top shape
- Built-in WIFI module for easy transfer of images to the cloud and remote instant download and analysis

Applications

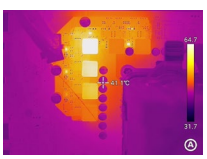


Power



HVAC

Oil and Petrochemical



Electronic Information

Specifications

Product model	H4
Imaging and Optics	
Detector Resolution	Focal Plane Array, Uncooled Microbolometer, 480x360 pixels, non-interpolate
Minimum Spectral Range Coverage	7.5 to 14 μm
Image frame rate (on display)	30 Hz, non-interlaced
Thermal Sensitivity at 30°C (NETD)	≤ 0.03°C (30 mK) at 30 Hz image frame rate
Field of view (FOV)	25°×19°/24°×18°
Instantaneous Field of View (IFOV)	0.91 mrad
Minimum Focus Distance	0.15 m
Focus	Manual / Automatic / Touch autofocus / Continuous autofocus
Laser Distance Meter	Calculates Distance to target for precisely focused
Laser Alignment	Position is automatically displayed on the infrared image
Visual	Built-in, 8 Mpixels, full color
Digital Zoom	1.0 - 16x Continuous
Image Presentation Mode	IR (Infrared), VS (Visible Light), PIP (Picture in Picture) IR Resizable and movable, MIF (Auto blend)
Image Adjustment	Level Span Mode: Automatic, Semi-Automatic, Manual
Measurement and analysis	
Emissivity correction	Variable from 0.01 to 1.0 (at 0.01 step) or selected from listings in pre-defined material list
Temperature Range	Support auto-switching: -40°C to 150°C, 0°C to 650°C, Optional 500°C to 2000°C (High temperature lens is required)
Accuracy	±2°C or ±2% of reading, whichever is greater at 25°C ambient
Measurement mode	12 movable spots, 12 areas, 12 lines (auto maximum and minimum temperature)
Atmospheric transmission correction	Input correction for humidity, temperature, and measuring distance
Reflected ambient temperature	Automatic, base on input of reflected temperature
Image Display	
Display screen	4.3” Colour Display, Touch Screen LCD (Resolution 800x480 pixels)
Connection and Interfaces	
Interfaces	USB, Bluetooth and Wifi for connection between the camera to smartphone, notebook computer, and tablet
Video Output	Display port to HDMI
Environmental parameter	
Operating temperature	-20°C to 50 °C
Protection	IP54

Specifications

Product model	H4
Shock	25 G
Vibration	2 G
Drop Test	2 m
Weight	1.2 kg (including battery)
Warranty	2 Years
Image Storage	
Storage media	Local storage (64 GB) and external SD card (64 GB and up to 256 GB)
File Format	
Thermal	24 bit radiometric IR digital image
Visual	Visual image shall be linked with corresponding thermal image
Power System	
Battery	Rechargeable battery, at least 4 hours operation for each battery
Accessories	
60 seconds voice annotation with each image file, Video output port, Communication cable, Standard lens (IFOV not more than 0.91 mrad), One (1) set battery charger and two (2) sets battery; Optional extra batteries, AC power adapter, single phase 230 VAC, 50 Hz, Data analysis software, Instruction manual in English and Thai, Other accessories according to manufacturer's design and auxiliary equipment necessary to complete	
Data Analysis and Reporting Software	
Data analysis and reporting software comprising useful function for Windows operating system with : thumbnail image viewer, support drag and drop transfer of selected images from memory card to computer, independent emissivities correction variable from 0.01 to 1.0 select from listings in pre-defined material list (at 0.01 step), spot tools, area tools, line tools, with maximum, minimum and average temperature, Delta T calculation function, voice note replay, wizard driven report generation, the report can be modified by user	