

PL Series Intelligent Thermal Camera

Refresh the temperature record at 30Hz



Introduce

With a built-in self-developed high-sensitivity IR detector with a maximum resolution of 640x480, a 13MP visible light camera, and 5 focusing modes, PL 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. Interconnected with the device via WIFI, the real-time screen can be previewed on the mobile app Thermography, including screens under four image modes: IR, VL, MIF, and PIP. Coupled with the comprehensive ThermoTools infrared analysis software on the PC side, professional reports can be generated easily in a few steps for high efficiency and outstanding experience.

Features and Benefits

- The new generation of self-developed IR detectors with a maximum resolution of 640x480
- ASIC algorithms for pixel point details and hidden hazards
- A 13MP 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
- Built-in WIFI module for easy transfer of images to the cloud and remote instant download and analysis
- OTA online upgrades to keep the device in top shape

Application

- Power
- Iron and steel metallurgy
- Oil and Petrochemical
- HVAC
- Intelligent Manufacturing
- Electronic Information

Specifications

Product model	PL610	PL630
Imaging and optics		
Detector type	VOx, 7.5 to 14μm	
Infrared resolution	480 × 360@12μm	640 × 480@12μm
Super resolution technology	Yes, Upgrade to 960 × 720	Yes, Upgrade to 1280 × 960
NETD	≤45 mK	≤40 mK
Infrared frame rate	30 Hz / 9 Hz	
Focal length	17.7 mm	
Field of view	25° × 19°	
I FOV	0.71mrad	
Minimum object distance	0.15m	
D:S	1408:1	
Focusing mode	Manual / Automatic / Continuous autofocus	
Digital zoom	1.1x to 16x	1.1x to 20x
Shot recognition	Auto	
Measurement and analysis		
Measurement range	Support auto-switching: -40°C to 150°C, 0°C to 650°C	
Measurement accuracy	±2°C or ±2%, whichever is greater	
Analyzed target	Spot × 12, Line × 12, Area × 12	Spot × 16, Line × 16, Area × 16
Tracking / Alarm	Full screen maximum, minimum and average temperature tracking; The maximum, minimum and average temperature tracking of analyzed target; full screen temperature threshold alarm (image and voice)	
Temperature measuring parameters	Emissivity, reflected temperature, target distance, humidity, atmospheric transmittance, optical transmittance, dew point	
Others	Isothermals, Smart Stroke, Intelligently calculate the area	
Image display		
Display screen	4.3", 800×480 pixel touchscreen LCD	
Digital camera	8 MP	13 MP
Image mode	IR, VIS, MIF, PIP	
Image adjustment	Level span mode: Automatic, Semi-automatic, Manual	
Color palettes	White Hot, Iron Red, Arctic, Rainbow 2, Hot Iron, Rainbow 1, Fulgurite, Medical, Tint, Black Hot, Blue Hot, Sepia, Green Hot, Ice and Fire, Amber, Customized	
Functions		
Recording function	Photo (image stitching) and video (infrared & visible light)	
Cloud Services	Available	
Others	Customized physical button, Intelligent diagnosis, NFC connection, OTA update	
Storage and transmission		
Storage media	Local storage (64 GB) and external SD card (64 GB and up to 256 GB)	
Image storage	JPG with temp info	
Video storage	MP4 format (without temp info) can be used to record audio synchronously; Irgd (with temp info), up to 30 Hz (optional) for temperature analysis	
External interface	Type-C, SD card slot, UNC ¼"-20 (Tripod mounting)	
WIFI	Yes, it can be connected to the mobile terminal for image and real-time video transmission	
Bluetooth	Bluetooth 5.0, support image transmission (only for Android)	
Power system		
Battery type	Lithium-ion rechargeable battery	
Battery working time	≥4 hours	
Charging mode	TYPE-C charging; PC/portable charger; Capable of charging while using	
Charging time	90% of full charge in 2.5 hours	
Environmental parameters		
Working temperature	-20°C to 50°C	
Storage temperature	-40°C to 60°C	
IP rating	IP54	
Drop	2m drop test	
Certification	CE, FCC, ROHS, KCC, Anatel, Damp heat test, Vibration test, Shock test, Impact test, UN38.3, MSDS	
Physical parameters		
Hardware	Laser (Indication, Ranging), Illuminator, Microphone, Speaker, Electronic Compass, GPS	
Weight	≤1.15KG (with battery)	
Size (L × W × H)	292 × 125 × 125 mm	
Software kit	PC: ThermoTools; Mobile: Thermography (iOS/Android)	
Standard	A device (with lens), Front and lens covers, Lithium-ion battery (2 pcs), Desktop charger, Power adapter (2 pcs), Adapter plug (3 pcs), Cable (double-headed TYPE-C USB), TYPE-C USB cable, SD card (64 GB), Wrist strap, Shoulder strap, Safety box, Packaging list, Quick Start Guide, Data download card (analysis software & user manual), Certificate of approval, Factory certificate	
Options	Battery, optional lens (44°, 15°, 7°, 25°, high-temperature lens, macro lens), Carrying bog, Tripod, Bluetooth earphone, Docking station	