Built For The Experts

PS Series High Performance Thermal Camera

GUIDE

Introduction

The PS Series high-performance thermal camera is designed to make the inspection, maintenance and troubleshooting work easier, faster and more accurate. It adopts a new generation of uncooled IR focal-plane detectors, which provides sharper thermal images and higher measurement accuracy. With its rotatable lens and screen structure, up to 13 million pixels visible light camera module, high precision rangefinder, and supplemented by some professional functions such as intelligent area measurement, flexible emissivity settings by areas, super-resolution reconstruction, strive to meet the needs of every thermography experts.

Applications

- ⊙ Electric Utilities Inspections
- ⊙ Building Inspections
- ⊙ Oil and Gas Maintenance
- ⊙ Research and Development

Features

- ⊙ With a rotatable design, the display rotates 270 and the lens rotates 70 upwards for easy viewing angle
- ⊙ With a new generation of focus motor and professional laser rangefinder, 1-touch autofocus in 0.4 second
- ⊙ Upgraded visible light camera, flagship model up to 13 million pixels, supports infrared and visual imaging dual-channel video recording
- ⊙ Optional lenses are available such as macro/wide-angle/Medium telephoto lens/telephoto lens, support automatic calibration, easy to replace
- ⊙ Support cloud services, upload local images to the cloud at any time, for remote analysis and problem feedback
- ⊙ -40°C ~ 2000°C ultra-wide temperature range, support automatic switching, suitable for more application scenarios

Specifications

Model	PS610
Imaging and optics	
Detector type	VOx, Focal Plane Array (FPA), uncooled microbolometer
Infrared resolution	640x480 @ 17µm, non-interpolate
Super resolution technology	Yes, Upgrade to 1280x960
Wavelength range	7.5 to 14 µm
Focal length	25 mm
Field of view	25° x 19°
Minimum object distance	0.3 m
D:S (IFOV)	1470:1 (0.68 mrad)
NETD at 30°C (at 30 Hz image frame rate)	≤ 30mK
Infrared frame rate (on display)	30 Hz, non-interlaced
Focusing mode	Automatic and Electric (Manual)
Digital zoom	1.1x to 35x
Shot recognition	Auto / Manual
Measurement and analysis	
Measurement range	Support auto-switching: -40°C to 150°C, 100°C to 800°C, Optional 700°C to 2000°C (High temperature lens is required)
Measurement accuracy	±1°C or ±1%, whichever is greater
Analyzed target	20 in total (Spot/Line/Area), Auto maximum and minimum temperature
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)
Isothermals	Available
Temperature measuring parameters	Emissivity, reflected temperature, target distance, humidity, atmospheric transmittance, optical transmittance
Emissivity Correction	Variable from 0.01 to 1.0 or select from listings in pre−defined materials list (at 0.01 step)
Reflected ambient temperature	Automatic, base on input of reflected temperature
Image display	
Display screen	5″ LCD
Eyepiece (Viewfinder for outdoor inspection)	Color built-in Viewfinder : 1, 280 × 960 LCOS screen
Digital camera	13 MP, full color
Image mode	IR, VIS, MIF and PIP
Image adjustment	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, Customized
Storage and transmission	
Storage media	Local storage (64 GB) and SD card (64 GB and up to 128 GB)
Image storage format	24 bit radiometric IR digital image
Visual image	Visual image shall be linked with the corresponding thermal image
Video storage with temperature information	Irgd for temperature analysis
External interface	USB Type-C, DC (12V) , SD card slot, Network port, Micro HDMI, UNC ¼ "-20 (Tripod mounting)
Audio	Recording and playback through microphones and speakers respectively
WIFI	Yes, it can be connected to the mobile terminal for image and real-time video transmission
GPS	Available
Bluetooth	Available
4G / 5G	4G module (Optional)
Power system	
Battery type	Lithium-ion rechargeable battery
Battery working time	≥3 hours
Power management	Timed shutdown and sleep mode
Charging mode	The device can be charged through desktop charger after shutdown.
Environmental parameters	
Weight	≤1.35 Kg (with battery)
Working temperature	-20°C to 50°C
Storage temperature	-40°C to 70°C
IP rating	IP54
Certification	CE, FCC, ROHS, KCC, Anatel, Damp heat test, Vibration test, Shock test, Impact test, UN38.3, MSDS

Complete With

Sixty (60) seconds voice annotation with each image file, Video output port, Communication Cable, Standard Lens and Telephoto (IFOV for Telephoto lens not more than 0.4 mrad) One (1) set battery charger and two (2) sets battery ; Optional extra batteries, AC Power Adaptor, single phase, 230 V AC, 50 Hz, Transport Case, Instruction Manual in English and Thai Other accessories according to manufacturer's design and auxiliary equipment necessary to complete.

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 PC card to computer independent emissivities correction variable from 0.1 to 1.0 or select from listings in pre − defined materials list (at 0.01 step), spot tools, area tools and line tools with maximum, minimum and average temperature, and Delta T calculation function, voice note replay, wizard driven report generation, the report can be modified by user