PS800 High Performance Thermal Camera

Produce with extraordinary imaging quality

1024

Introduction

The Guide PS800 high-performance thermal camera is designed to make the inspection, maintenance and troubleshooting work easier, faster and more accurate. It adopts 1024×768 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 AI recognition naming, intelligent area measurement, flexible emissivity settings by areas, super-resolution reconstruction, strive to meet the needs of every thermography experts.

Features and Benefits

- 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
- Support AI voice recognition, text photo recognition and typing, convenient for customizing the image name
- Optional lenses are available such as Macro/ Wide-angle/ Medium telephoto/ 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

Application

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

Specifications

Model	PS800
Imaging and optics	
Detector type	VOx
Infrared resolution	1024 × 768@12μm
Super resolution technology	Yes, Upgrade to 2048 × 1536
Wavelength range	7.5 to 14μm
Focal length	28 mm
Field of view	25° × 19°
Minimum object distance	0.3 m
D:S	2325:1
NETD	≤30 mK
Infrared frame rate	25 Hz / 9 Hz
Focusing mode	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	Spot × 30, Line × 30, Area × 30
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
Image display	
Display screen	5'' LCD
Eyepiece	1, 280 × 960 LCOS screen
Digital camera	13 MP
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	JPG with temp info
Video storage without temperature information	MP4 format can be used to record audio synchronously
Video storage with temperature information	Irgd for temperature analysis
External interface	Type-C, DC (12V) , SD card slot, Network port, Micro HDMI, UNC ¼"-20 (Tripod mounting)
Laser	630~670nm, Class 2 laser, ＜1mW, indicating the measured target and laser ranging
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.
Charging time	90% of full charge in 2.5 hours
Environmental parameters	
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
Physical parameters	
Weight	≤1.5 Kg (with battery)
Size (L × W × H)	206 × 169 × 135 mm
Software kit	ThermoTools
Standard	A device, Lens cover, Lithium-ion battery, Power adapter, Adapter plug (5) , TYPE-C USB cable, Micro HDMI cable, Network cable, Quick Start Guide, Instructions, Data download card, SD card (64 GB) , Shoulder strap, Carrying case, Factory certificate, Desktop charger
Options	Lithium-ion battery, Carrying bag, Bluetooth headset, Expanded lens, 4G module, Tripod

Extended lens information list

Model	PS800
Standard Lens	
Focal length	28mm
FOV	25°×19°
IFOV	0.43mrad
Min focus distance	0.3m
Standard Lens+Wide Angle（48°×35°）	
Focal length	15mm
FOV	45°×34°
IFOV	0.8mrad
Min focus distance	0.1m
Standard Lens+Medium Telephoto（11°×8°）	
Focal length	45mm
FOV	15°×11°
IFOV	0.27mrad
Min focus distance	3m
Standard Lens+Telephoto（7°×5°）	
Focal length	75mm
FOV	9°×7°
IFOV	0.16mrad
Min focus distance	5m
Standard Lens+Macro Lens	
Working distance	67mm
Object/target Size	23.3mm*17.5mm
Spatial Resolution(IFOV)	60.7μm
Standard Lens+High Temp	
FOV	25°×19°
Temp Measurement Range	-40°C~2000°C

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*Technical parameters are subject to change without notice. For the latest information, please visit our website:

www.guideir.com