

PS800 High Performance Thermal Camera

Produce with extraordinary imaging quality



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 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

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+Telephoto (11°×8°) | |
| Focal length | 45mm |
| FOV | 15°×11° |
| IFOV | 0.27mrad |
| Min focus distance | 3m |
| Standard Lens+Ultra-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 |

