PS Series
High Performance Thermal Camera

Built For The Experts

DESIGN AWARD 2017
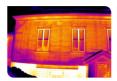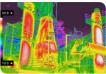
红星奖 Red Star Design Award

270°

180°

70°

Introduce

The Guide 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 AI recognition naming, intelligent area measurement, flexible emissivity settings by areas, super-resolution reconstruction, strive to meet the needs of every thermography experts.

Application

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

Features and Benefits

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

Specifications

Product model	PS400	PS600	PS610	PS800
Imaging and optics				
Detector type	VOx			
Infrared resolution	384 × 288@17μm	640 × 480@17μm		1024 × 768@12μm
Super resolution technology	Yes, Upgrade to 768 × 576	Yes, upgrade to 1280 × 960		Yes, Upgrade to 2048 × 1536
Wavelength range	7.5 to 14μm			
Focal length	15 mm	25 mm		28 mm
Field of view	25° × 19°			
IFOV	1.13mrad	0.68mrad		0.43mrad
Minimum object distance	0.15 m	0.3 m		
D:S	885:1	1470:1		2325:1
NETD	≤45 mK	≤40 mK	≤30 mK	
Infrared frame rate	30 Hz / 9 Hz			25 Hz / 9 Hz
Focusing mode	Automatic / Electric			
Digital zoom	1.1x to 10x	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	±2°C or ±2%, whichever is greater		±1°C or ±1%, whichever is greater	
Analyzed target	Spot × 12, Line × 12, Area × 12	Spot × 16, Line × 16, Area × 16	Spot × 20, Line × 20, Area × 20	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	8 MP	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, Customized	White Hot, Iron Red, Arctic, Rainbow 2, Hot Iron, Rainbow 1, Fulgurite, Medical, Tint, Black Hot, Customized	White Hot, Iron Red, Arctic, Rainbow 2, Hot Iron, Rainbow 1, Fulgurite, Medical, Tint, Black Hot, Blue Hot, Sepia, Customized	
Functions				
Shooting	Photo (image stitching) and video (infrared & visible light)			
Others	Customized physical button			
Storage and transmission				
Storage media	Local storage (64 GB) and SD card (64 GB and up to 128 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) 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			
Cellular network	4G module (optional)			
Power system				
Battery type	Lithium-ion rechargeable battery			
Battery working time	≥4 hours			≥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	≤1.35 Kg (with battery)			≤1.5 Kg (with battery)
Size (L × W × H)	206 × 145 × 135 mm			206 × 169 × 135 mm
Software kit	ThermoTools			
Standard	A device, Lens cover, Lithium-ion battery, Power adapter, Adapter plug (5 pcs) , 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		A device, Lens cover, Lithium-ion battery, Power adapter, Adapter plug (5 pcs) , 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, Desktop charger, Bluetooth headset, Expanded lens, 4G module, Tripod		Lithium-ion battery, Carrying bag, Bluetooth headset, Expanded lens, 4G module, Tripod	