



# GUIDE

## Built For The Experts

**PS Series**

High Performance  
Thermal Camera

### 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.

### 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

### Applications

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



## Specifications

Product model	PS400	PS600	PS610	PS800
<b>Imaging and optics</b>				
Detector type	VOx, 7.5 to 14μm			
Infrared resolution	384×288@17μm	640×480@17μm		1024×768@12μm
Super resolution	Yes, Upgrade to 768×576	Yes, upgrade to 1280×960		Yes, Upgrade to 2048×1536
NETD	45mK	40mK	30mK	
Frame rate	30Hz/ 9Hz			25Hz/ 9Hz
Focal length	15mm	25mm		28mm
Field of view	25°×19°			
IFOV	1.13mrad	0.68mrad		0.43mrad
Min. object distance	0.15 m	0.3 m		
D:S	885:1	1470:1		2325:1
Focusing mode	Automatic / Electric			
Digital zoom	1.1x to 10x	1.1x to 35x		
<b>Measurement and analysis</b>				
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	12 in total (Spot/ Line/ Area)	16 in total (Spot/ Line/ Area)	20 in total (Spot/ Line/ Area)	30 in total (Spot/ Line/ Area)
Alarm	Full screen temperature threshold alarm (image and voice)			
Parameter settings	Emissivity, reflected temperature, target distance, humidity, atmospheric temperature, optical transmittance			
Others	Isothermals, Smart Stroke, Intelligently calculate the area			
<b>Image display</b>				
Display screen	5" LCD			
Eyepiece	1280×960 LCOS screen			
Image mode	IR, VIS, MIF and PIP			
Color palettes	8: White Hot, Iron Red, Arctic, Rainbow 2, Hot Iron, Rainbow 1, Fulgurite, Medical, Customized	10: White Hot, Iron Red, Arctic, Rainbow 2, Hot Iron, Rainbow 1, Fulgurite, Medical, Tint, Black Hot, Customized	12: White Hot, Iron Red, Arctic, Rainbow 2, Hot Iron, Rainbow 1, Fulgurite, Medical, Tint, Black Hot, Blue Hot, Sepia, Customized	
Image adjustment	Level span mode: Automatic, Semi-automatic, Manual			
Digital camera	8 MP	13 MP		
<b>Functions</b>				
Laser	Laser (Indication, Ranging)			
Recording function	Photo and Video (infrared & visible light)	Photo (image stitching) and Video (infrared & visible light)		
Cloud Services	Available			
Others	Customized physical button			
<b>Storage and transmission</b>				
Storage media	Built-in (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)			
WIFI	Yes, it can be connected to the mobile terminal for image and real-time video transmission			
Cellular network	4G module (optional)			
Bluetooth	Available			
<b>Power system</b>				
Battery type	Lithium-ion rechargeable battery			
Operating time	4 hours			3 hours
Charging mode	The device can be charged through desktop charger after shutdown.			
Charging time	90% of full charge in 2.5 hours			
<b>Environmental parameters</b>				
Working temperature	-20°C to 50°C			
IP rating	IP54			
Certification	CE, FCC, ROHS, KCC, Anatel, Damp heat test, Vibration test, Shock test, Impact test, UN38.3, MSDS			
<b>Physical parameters</b>				
Hardware	Illuminator, Microphone, Speaker, Electronic Compass, GPS			
Weight	1.35kg (with battery)			1.5kg (with battery)
Size	206×145×135mm			206×169×135mm
Software kit	PC: ThermoTools; Mobile: Thermography (iOS/Android)			
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