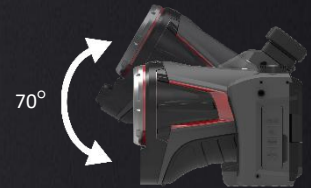
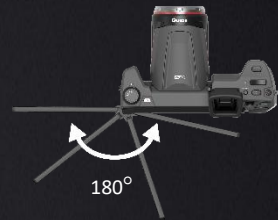


PS Series

High Performance Thermal Camera

Built For The Experts



Introduction

The **Raytek** 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

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

Features and Benefits

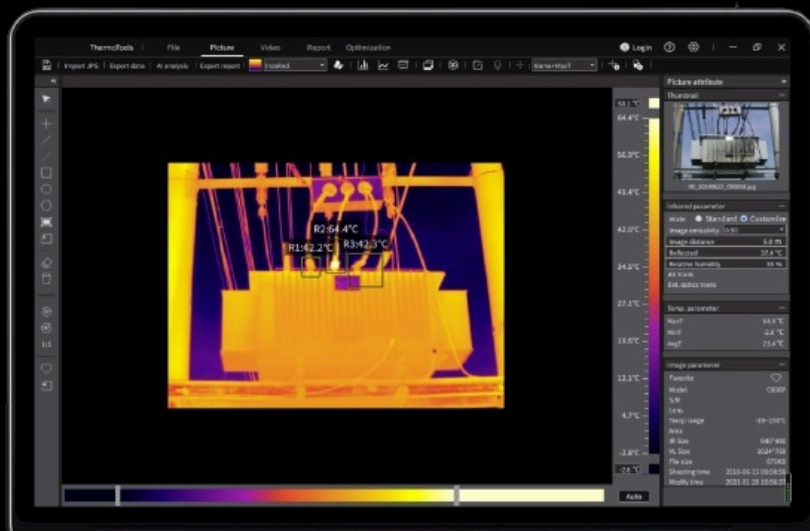
- With a new generation of focus motor and professional laser rangefinder, 1-touch autofocus in 0.4 second
- Upgraded visible light camera, flagship model up to 13 million pixels, supports infrared and visual imaging dual-channel video recording
- Support AI voice recognition, text photo recognition 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

Raytek Performance Series(PS) Specifications

MODEL	PS 480	PS 640	PS 640N	PS 1024
IR Imaging Performance				
Detector type	384×288@17μm, VOx	640×480@17μm, VOx		1024×768@12μm, VOx
Spectral	7.5~14μm			
Frame rate	30Hz/9Hz			25Hz/9Hz
NETD	45mk(Optional 30mk)	40mk(Optional 30mk)	30mk	30mk
Lenses Options				
Focal length	15mm	25mm		28mm
FOV	25°×19°			
IFOV	1.13mrad	0.68mrad		0.43mrad
Min focus distance	0.15m	0.3m		0.3m
D:S	885:1	1470:1		2325:1
Focus	1-touch fast autofocus, support electric/manual focus switch			
Lens Identification	Automatically identify and calibrate the lens without manual switching			
Image Presentation				
Visual Image	8 million pixels, autofocus(Optional 13 million pixles)		13 million pixels, autofocus	
LCD Display	5",1280×720 High Light Touch Screen			
Viewfinder	1280×960 LCOS Screen			
Image Mode	IR image/Visual image/PIP/MIF			
Digital Zoom	1×~10× continuously	1×~35× continuously		
Color Palettes	8 Color Palettes, and customizable	10 Color Palettes, and customizable	12 Color Palettes, and customizable	
Super-resolution	4× Super-resolution, 768x576	4× Super-resolution, 1280x960		4× Super-resolution, 2048x1536
Functions				
AI Voice Naming	Support AI voice naming, AI text recognition naming (text can be recognized by taking pictures), and typing			
Professional Laser Rangefinder	The distance between the thermal camera and target is automatically measured and displayed on the thermal image			
Temperature Measurement for Areas	Automatically measure the area of the boxes and circles			
Smart Stroke	Automatically outline the target contour by setting the area and tolerance (color difference between two pixels)			
Measurement Corrections	Support emissivity correction, atmospheric transmittance correction and optical transmittance correction			
Level Span	Automatic, semi-automatic, manual			
Panorama Image Mosaic	N/A	YES		
Cloud Service	Support local and cloud data upload and download			
Measurement				
Temp Measurement Range	Support auto-switching, Filter 1:-40°C~150°C; 2:100°C~800°C; Optional 700°C~2000°C(High temperature lens required)			
Accuracy	±2°C~±2%, whichever is greater		±1°C~±1%, whichever is greater	
Temp Measurement Area (IR/PIP)	spot×12, line×12, area×12	spot×16, line×16, area×16	spot×20, line×20, area×20	spot×30, line×30, area×30
Analysis Storage	The analysis object can be saved with the image (spots, lines, areas)			
Auto Max & Min Temp Tracking (IR / PIP)	It can track the highest temperature/lowest temperature/average temperature of the whole screen and the analysis object at the same time			
Isotherm	Up and down, centered interval			
Temperature Alarm	Automatic alarm (image and sound) when exceeding the alarm temperature threshold, and supports the area alarm function			
Storage				
Image Storage	Built-in 64G, external SD card supports up to 64G			
Image Format	Picture format JPG (with temperature information)			
Video Format	MP4 (without temperature information) or IRGD (with temperature information)			
Dual-path Recording	Support simultaneous recording of visible light and infrared video (with temperature data), support manual storage/timing storage			
Other				
Hardware	Flashlight, laser (laser indication, ranging, focus), WIFI, microphone (adjustable volume), speaker (adjustable volume), electronic compass, GPS, light sensor, Bluetooth			
Interface	TYPE-C (used to transmit native image data with PC), power supply (12V), SD card, Gigabit Ethernet, Micro HDMI, tripod interface			
Battery	Rechargeable lithium battery (according to UN38.3 certification); can work for 4 hours (comprehensive working time); with sleep mode			
Working Temperature	Working temperature: -20°C~50°C Storage temperature: -40°C~70°C			
Encapsulation	IP54			
Size	206mm×145mm×135mm			206mm×169mm×135mm
Weight	1350g			
Certificates	CE, FCC, ROHS, KC, UN38.3			
Standard Accessories	Thermal Camera, Lens Cover, 2 Lithium Batteries, Power Adapter, Adapter Plug (5), TYPE-C to USB cable, Micro HDMI to HDMI cable, Network Cable, Quick Start Guide, User Manual, Data Download Card, SD Card (64GB), Shoulder Strap, Safety box, Calibration Certificate			
Optional Accessories	Lithium Battery, Carrying bag, Cradle Charger, Bluetooth Headset, Extended Lens(Wide-angle/Medium telephoto/Telephoto/Macro/High temperature), Lens Bag, 4G LTE USB Dongle			

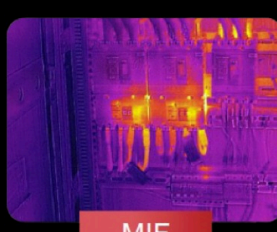
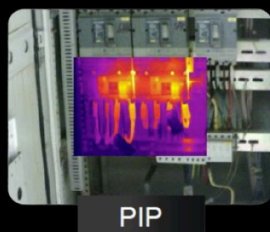
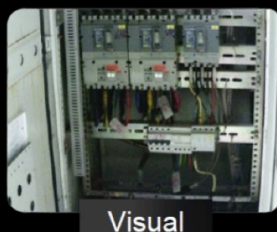
Raytek PS series Lens Specifications

Standard Lens			
Focal length	15mm	25mm	28mm
FOV	25°×19°	25°×19°	25°×19°
IFOV	1.13mrad	0.68mrad	0.43mrad
Min focus distance	0.15m	0.3m	0.3m
Standard Lens+Wide Angle (48°×35°)			
Focal length	7.78mm	13mm	15mm
FOV	45°×34°	45°×34°	45°×34°
IFOV	2.19mrad	1.31mrad	0.8mrad
Min focus distance	0.1m	0.15m	0.1m
Standard Lens+Telephoto (11°×8°)			
Focal length	33mm	55mm	45mm
FOV	11°×9°	11°×9°	15°×11°
IFOV	0.52mrad	0.31mrad	0.27mrad
Min focus distance	2m	2m	3m
Standard Lens+Ultra-Telephoto (7°×5°)			
Focal length	50.7mm	85mm	75mm
FOV	7°×6°	7°×6°	9°×7°
IFOV	0.34mrad	0.2mrad	0.16mrad
Min focus distance	4m	4m	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		



Raytek Thermotools Software

- Detail Thermal Analysis of Images stored in Camera with Name of Object , date and time stamping
- Basic & Advanced Reporting
Area specific emissivity settings
- Line, Square, Free Object Thermal Analysis
- History Image Trending
- Open Protocols to integrate with Other Softwares



Thermal Image Modes
Full Infrared (IR)
Picture in Picture (PIP)
Radiometric Visual (Visual)
Visual and Infrared Fusion (MIF)

Standard Accessories

Camera



HDMI Cable

Lens Cap



USB Cable

2 Batteries



LAN Cable

Charges



Hard Carrying Case



Universal Plugs



Manual



Hand /shoulder Strap



Calibration Certificate



Memory Card



Optional Lenses



Wide Angle



Micro



High Temperature



Telephoto



Ultra Telephoto

