PT Series HD High-Performance Thermal Camera

The World's First Portable Thermal Camera with MP-level Infrared Resolution
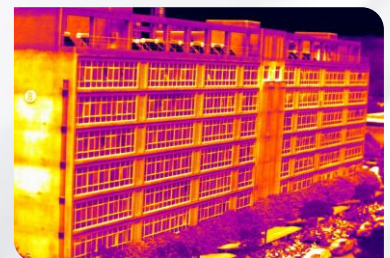
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Introduce

Guide PT Series is the world's first portable thermal camera with MP-level Infrared Resolution. Equipped with the self-developed 1280×1024 IR detector, this camera has the A/M-Focus manual and auto focusing system to provide much more crisp images. Advanced hardware, software and exceptional experience ensure it is the flagship in this industry.

Features and Benefits

o   Up to 1280x1024 IR resolution

o   ContFocus intelligent and continuous autofocus model

o   An optional temperature range to 2500°C for more applications

o   Observation of 36μm objects through a macro lens

o   IR video with temperature information at 20 Hz

o   PerIRVision image stitching technology

Application

o   Electric Utilities Inspections

o   Oil and Gas Maintenance

o   Building Inspections

o   Research and Development

Specifications

Product model	PT650	PT850	PT870
Imaging and optics			
Detector type	VOx		
Infrared resolution	640×512@12µm	1024 × 768@12µm	1280 × 1024@12µm
Super resolution technology	Yes, Upgrade to 1280 × 1024	Yes, Upgrade to 2048 × 1536	Yes, Upgrade to 2560 × 2048
Wavelength range	7.5 to 14µm		
Focal length	17 mm	28 mm	35 mm
Field of view	25°×19°		
IFOV	0.71mrad	0.43mrad	0.34mrad
Minimum object distance	0.3m		
D:S	1408:1	2325:1	2941:1
NETD	≤30mK	≤25mK	
Infrared frame rate	30 Hz / 9 Hz		
Focusing mode	Manual / Auto / Continuous autofocus / Laser-assisted autofocus / Touch to autofocus		
Digital zoom	1.1x to 40x	1.1x to 50x	
Shot recognition	Auto		
Measurement and analysis			
Measurement range	Support auto-switching: -40°C to 150°C, 0°C to 650°C, Optional 400°C to 2500°C (High temperature lens is required)	Support auto-switching: -40°C to 150°C, 0°C to 800°C, Optional 400°C to 2500°C (High temperature lens is required)	
Measurement accuracy	±1°C or ±1%, whichever is greater		
Analyzed target	Spot × 30, Line × 30, Area × 30	Spot × 35, Line × 35, Area × 35	
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, dew point		
Image display			
Display screen	5'', 1920×1080 pixel touchscreen LCD		
Eyepiece	1, 920 × 1, 080 OLED screen		
Digital camera	Dual visible light, up to 13 MP	Dual visible light, up to 16 MP	
Image mode	IR, VIS, MIF, 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, Green Hot, Ice and Fire, Amber, Customized		
Functions			
Shooting	Photo (image stitching) and video (infrared & visible light)		
Others	Customized physical button, Intelligent diagnosis, NFC connection, OTA update		
Storage and transmission			
Storage media	Local storage (64 GB) and external SD card (128 GB and up to 256 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), up to 20 Hz (optional) for temperature analysis		
External interface	Type-C, DC (12V) , SD card slot, 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	Bluetooth 5.0, support image transmission (only for Android)		
Cellular network	5G module (optional)		
Power system			
Battery type	Lithium-ion rechargeable battery		
Battery working time	≥4 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, revealed by the status screen		
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	≤1.86Kg (with battery)		
Size (L × W × H)	191 × 171 × 118 mm		
Software kit	ThermoTools		
Standard	A device (with lens), Front and lens covers, Lithium-ion battery (2 pcs), Desktop charger, Power adapter, Adapter plug (5 pcs) , TYPE-C USB cable, Micro HDMI cable, Type C to GE cable, SD card (128 GB) , Wrist strap, Shoulder strap, Carrying case, Safety box，Packaging list, Quick Start Guide, Data download card (analysis software & user manual), Certificate of approval, Factory certificate		
Options	Battery, optional lens (45°, 15°, 7°, 25°, high-temperature lens, macro lens), Carrying bog, Tripod, Bluetooth earphone, 5G module		