

# PT Series HD High-Performance Thermal Camera

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







#### Introduce

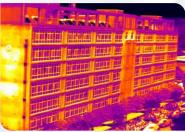
Guide PT Series is the world's first portable thermal camera with MP-level Infrared Resolution. Equipped with the self-developed 1280×1024 IR detector, this camera has the A/M-Focus manual and auto focusing system to provide much more crisp images. Advanced hardware, software and exceptional experience 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
- 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
- Oil and Gas Maintenance
- Building Inspections
- o Research and Development





### **Specifications**

Product model	PT650	PT850	PT870	
Imaging and optics	11030	1 1000	1 1070	
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	103, Opgrade to 1200 × 1024	7.5 to 14µm	res, opgrade to 2000 × 2040	
Focal length	17 mm	28 mm	35 mm	
Field of view	17 111111	25°×19°	33 11111	
IFOV	0.71mrad	0.43mrad	0.34mrad	
Minimum object distance	0.7 IIIIIdu	0.45fillau 0.3m	0.34III du	
D:S	1408:1	2325:1	2941:1	
NETD	1400.1	≤55mK	2941.1	
		30 Hz / 9 Hz		
Infrared frame rate	Manual / Auto / C	Manual / Auto / Continuous autofocus / Laser-assisted autofocus / Touch to autofocus		
Focusing mode				
Digital zoom	1.1x to 40x		to 50x	
Shot recognition		Auto		
Measurement and analysis	Compart outs quitaking: 40°C to 150°C 0°C to			
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)	lens is i	00°C, Optional 400°C to 2500°C (High temperature required)	
Measurement accuracy	±1°C or ±1%, whichever is greater			
Analyzed target	Spot × 30, Line × 30, Area × 30  Spot × 35, Line × 35, Area × 35  Spot × 36, Line × 36, 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 Temperature managing	Available			
Temperature measuring parameters	Emissivity, reflected temperature,	target distance, humidity, atmospheric transmittanc	e, 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 Rainhow 2 Hot Iron Ra	inbow 1, Fulgurite, Medical, Tint, Black Hot, Blue Hot	Senia Green Hot Ice and Fire Amber Customize	
Functions	Winter Flot, Horrica, Audito, Rambow 2, Flot Horr, Ra	T, Fulgarite, Mediodi, Filit, Black Flot, Black Flot	, depla, dreen flot, foe and fire, famber, dustoffile	
Shooting	Ph	oto (image stitching) and video (infrared & visible liq	nht)	
Others		physical button, Intelligent diagnosis, NFC connection		
Storage and transmission	Gustomized	sily diodr batton, intelligent diagnosis, it is conficulto	n, o m apaate	
Storage media	Local str	orage (64 CR) and external SD card (128 CR and up t	o 256 GR)	
Image storage	Local storage (64 GB) and external SD card (128 GB and up to 256 GB)  IPG with temp info			
Video storage	JPG with temp info			
	MP4 format (without temp info) can be used to record audio synchronously; Irgd (with temp info), up to 20 Hz (optional) for temperature analysis			
Lytornal intertage				
External interface	Type-C, DC	(12V), SD card slot, Micro HDMI, UNC 1/4"-20 (Tripod	d mounting)	
Laser	Type-C, DC 630~670nm, Cla	(12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripodass 2 laser, < 1mW, indicating the measured target $(12V)$	d mounting) and laser ranging	
Laser Audio	Type-C, DC 630~670nm, Cla Recording	c (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripodass 2 laser, < 1mW, indicating the measured target of and playback through microphones and speakers re	d mounting) and laser ranging espectively	
Laser Audio WIFI	Type-C, DC 630~670nm, Cla Recording	C (12V), SD card slot, Micro HDMI, UNC ¼"-20 (Tripodass 2 laser, < 1mW, indicating the measured target of and playback through microphones and speakers reflected to the mobile terminal for image and real-time	d mounting) and laser ranging espectively	
Laser Audio WIFI GPS	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn	c (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripod ass 2 laser, < 1mW, indicating the measured target of g and playback through microphones and speakers re- lected to the mobile terminal for image and real-time Available	d mounting) and laser ranging espectively video transmission	
Laser Audio WIFI GPS Bluetooth	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn	c (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripod ass 2 laser, < 1mW, indicating the measured target a g and playback through microphones and speakers re- ected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And	d mounting) and laser ranging espectively video transmission	
Laser Audio WIFI GPS Bluetooth Cellular network	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn	c (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripod ass 2 laser, < 1mW, indicating the measured target of g and playback through microphones and speakers re- lected to the mobile terminal for image and real-time Available	d mounting) and laser ranging espectively video transmission	
Laser Audio WIFI GPS Bluetooth Cellular network Power system	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn	5 (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripor ass 2 laser, < 1mW, indicating the measured target a g and playback through microphones and speakers re- prected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)	d mounting) and laser ranging espectively video transmission	
Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripor ass 2 laser, < 1mW, indicating the measured target at g and playback through microphones and speakers re- lected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)	d mounting) and laser ranging espectively video transmission	
Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripor ass 2 laser, < 1mW, indicating the measured target at and playback through microphones and speakers rejected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  > 4 hours	d mounting) and laser ranging espectively video transmission	
Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time Power management	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripor ass 2 laser, < 1mW, indicating the measured target as and playback through microphones and speakers rejected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  ≥ 4 hours  Timed shutdown and sleep mode	d mounting) and laser ranging espectively video transmission	
Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time Power management Charging mode	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn Blue	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripor ass 2 laser, < 1mW, indicating the measured target at g and playback through microphones and speakers rejected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  ≥ 4 hours  Timed shutdown and sleep mode rice can be charged through desktop charger after steep as 2 microscopic and 2 microscopic after steep as 2 microscopic and 2 microscopic after steep as 2 microscopic and 3 microscopic after steep and 2 microscopic after steep and 3 m	d mounting) and laser ranging espectively video transmission  lroid)	
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Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time Power management Charging mode Charging time Environmental parameters Working temperature	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn Blue	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripor ass 2 laser, < 1mW, indicating the measured target at g and playback through microphones and speakers resected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  ≥4 hours  Timed shutdown and sleep mode rice can be charged through desktop charger after stoof full charge in 2.5 hours, revealed by the status so -20°C to 50°C	d mounting) and laser ranging espectively video transmission  lroid)	
Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time Power management Charging mode Charging time Environmental parameters Working temperature Storage temperature	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn Blue The dev 90%	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripor ass 2 laser, < 1mW, indicating the measured target at and playback through microphones and speakers resected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  ≥4 hours  Timed shutdown and sleep mode rice can be charged through desktop charger after stoof full charge in 2.5 hours, revealed by the status so -20°C to 50°C -40°C to 70°C	d mounting) and laser ranging espectively video transmission  lroid)  mutdown. creen	
Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time Power management Charging mode Charging time Environmental parameters Working temperature Storage temperature IP rating	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn Blue The dev 90%	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripor ass 2 laser, < 1mW, indicating the measured target at and playback through microphones and speakers resected to the mobile terminal for image and real-time Available  etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  ≥4 hours  Timed shutdown and sleep mode rice can be charged through desktop charger after sleep of full charge in 2.5 hours, revealed by the status scenario.	d mounting) and laser ranging espectively video transmission  lroid)  mutdown. creen	
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Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time Power management Charging mode Charging time Environmental parameters Working temperature Storage temperature IP rating Certification Physical parameters	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn Blue The dev 90%	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripot ass 2 laser, < 1mW, indicating the measured target at and playback through microphones and speakers reflected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  ≥4 hours  Timed shutdown and sleep mode rice can be charged through desktop charger after sleep of full charge in 2.5 hours, revealed by the status so  -20°C to 50°C  -40°C to 70°C  IP54  Inatel, Damp heat test, Vibration test, Shock test, Impared.	d mounting) and laser ranging espectively evideo transmission  lroid)  mutdown. creen	
Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time Power management Charging mode Charging time Environmental parameters Working temperature Storage temperature IP rating Certification Physical parameters Weight	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn Blue The dev 90%	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripot ass 2 laser, < 1mW, indicating the measured target at and playback through microphones and speakers reflected to the mobile terminal for image and real-time Available etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  ≥4 hours  Timed shutdown and sleep mode rice can be charged through desktop charger after sleep of full charge in 2.5 hours, revealed by the status so  -20°C to 50°C  -40°C to 70°C  IP54  natel, Damp heat test, Vibration test, Shock test, Imp	d mounting) and laser ranging espectively evideo transmission  lroid)  mutdown. creen	
Laser Audio WIFI GPS Bluetooth Cellular network Power system Battery type Battery working time Power management Charging mode Charging time Environmental parameters Working temperature Storage temperature IP rating Certification Physical parameters Weight Size (L × W × H)	Type-C, DC 630~670nm, Cla Recording Yes, it can be conn Blue The dev 90%  CE, FCC, ROHS, KCC, A  A device (with lens), Front and lens covers, Lithiu HDMI cable, Type C to GE cable, SD card (128)	C (12V) , SD card slot, Micro HDMI, UNC ¼"-20 (Tripot ass 2 laser, < 1mW, indicating the measured target and playback through microphones and speakers reflected to the mobile terminal for image and real-time Available  etooth 5.0, support image transmission (only for And 5G module (optional)  Lithium-ion rechargeable battery  ≥4 hours  Timed shutdown and sleep mode  rice can be charged through desktop charger after sleep of full charge in 2.5 hours, revealed by the status so  -20°C to 50°C  -40°C to 70°C  IP54  natel, Damp heat test, Vibration test, Shock test, Imp  ≤1.86Kg (with battery)  191 × 171 × 118 mm	d mounting) and laser ranging espectively video transmission  lroid)  nutdown.  creen  pact test, UN38.3, MSDS  er, Adapter plug (5 pcs) , TYPE-C USB cable, Microty box. Packaging list, Quick Start Guide, Data	