



Professional **Tools**

Thermal Imaging Cameras



CATALOG

Guide Sensmart



Globally advanced R&D bases for whole infrared industrial chain

The new Guide Infrared Industrial Park locates at the core zone of China Optics Valley and it covers an area of 133,400 m². It has been developed into the biggest infrared thermal industrialized bases in Asia with the world-class scientific research, design and production facility which integrates infrared thermal imager, infrared detector and composited optoelectronic system.

Company profile

Established in 2016, Guide Sensmart is a comprehensive infrared imaging solution supplier with 20 years' experience in design, R&D, manufacturer and sales of infrared thermal imaging products.

At present, Guide Sensmart's thermal imaging products are applied in outdoor observation, security and surveillance, law enforcement, firefighting and rescue, body temperature screening, industrial inspection, industrial automation, smart home and consumer electronics and more.

Key Advantage

Technology

Fully localized thermal sensor R&D and production

Quality

500,000 units with quality assurance per year

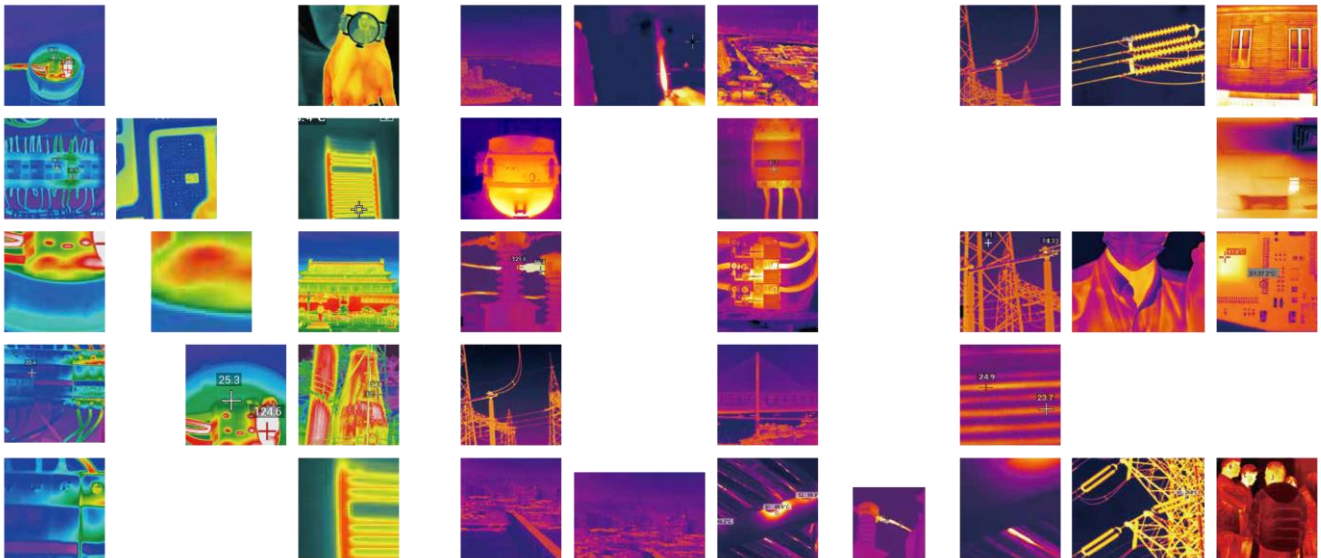
Service

Product Applications and Professional Service for 20 Years

Innovation

Customer-centered Innovation With Over 120 Patents

Guide ranks Top 2 in the global infrared thermal imaging market

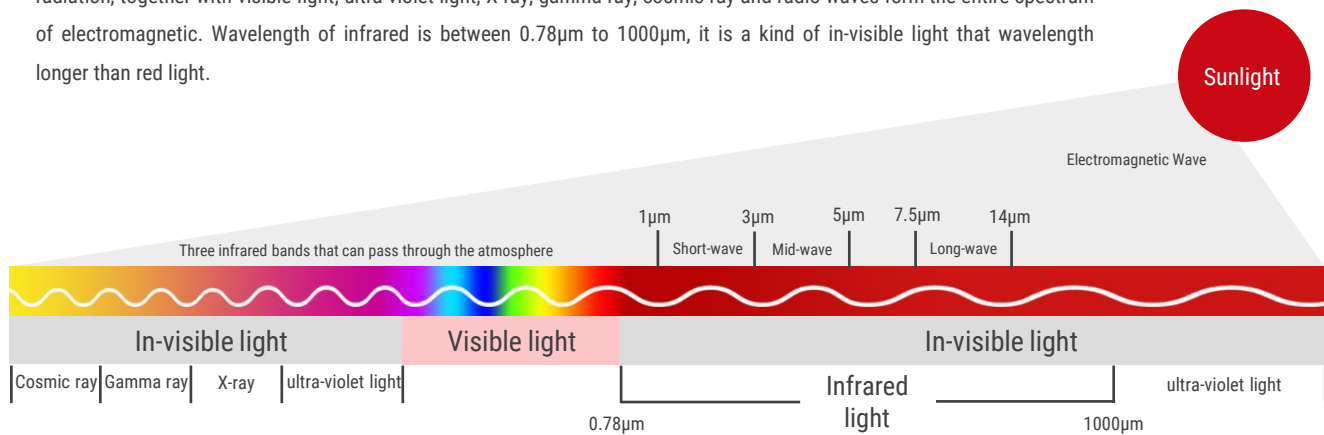


* Yole Développement 《Thermal Imagers and Detectors 2020 | Report 》

Technical principles of Thermal Camera

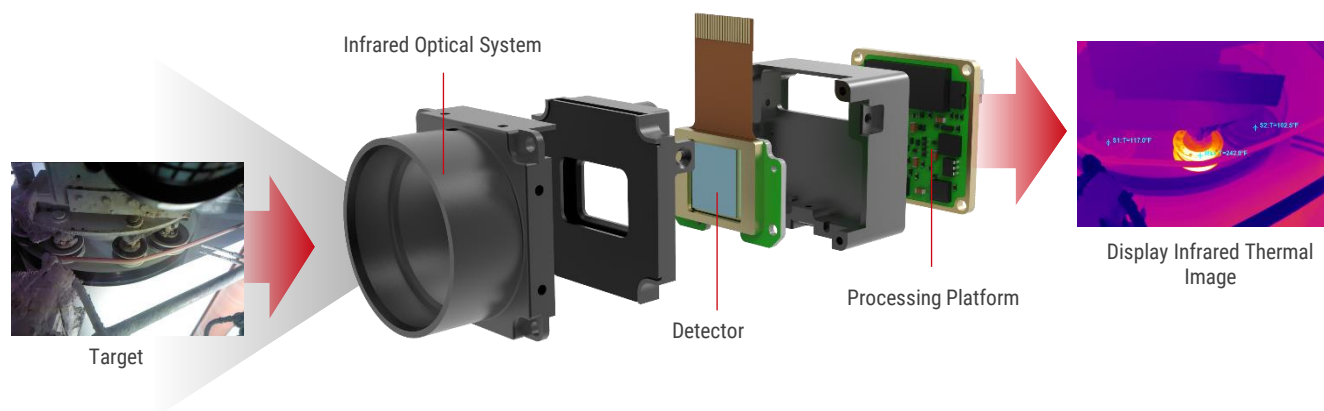
What is Infrared?

Any object that has a temperature above absolute zero (-273.15 degrees Celsius or 0 Kelvin) emits radiation. The infrared radiation, together with visible light, ultra-violet light, X-ray, gamma ray, cosmic ray and radio waves form the entire spectrum of electromagnetic. Wavelength of infrared is between $0.78\mu\text{m}$ to $1000\mu\text{m}$, it is a kind of in-visible light that wavelength longer than red light.



What is Infrared Camera?

Infrared thermal imaging system uses infrared detectors to sense infrared radiation, and convert it to electrical signals which are then amplified, processed to an image displayed.



Basic Principle

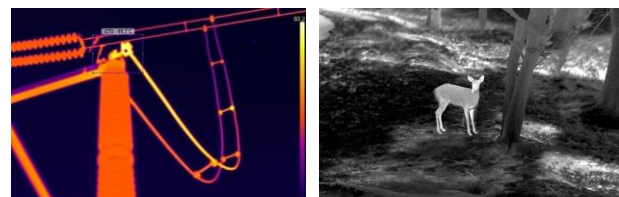
Thermal imaging technology is a kind of passive, non-contact detection and recognizing technology.

Thermography

Non-contact temperature measurement and fault detection

Night Vision

Easily detect and identify the target in total darkness



Advantages



Simple and intuitive: Pinpoint the abnormal hot/cold spots and predict the potential failures effectively with IR images supports.



Weather Proof: Thermographic camera could work very well even in the night, or any bad weather of poor visibility, such as heavy fog and dusty weather. No limitation of visible light, can be operated in night and bad weather.



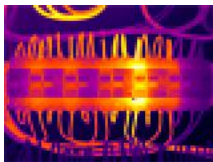
Efficient and time-saving: The general view of IR image will display the temperature's distribution clearly. In that case, the operator could inspect the large area very quick, the inspection time are reduced to great extents.



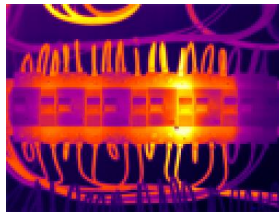
Safe and accurate: Temperature reading could be accomplished passively and accurately even when the observing target is far away from the thermographic camera. This non-contact inspection way ensures operator's safety if in tough working environment.

IR Detector Resolution

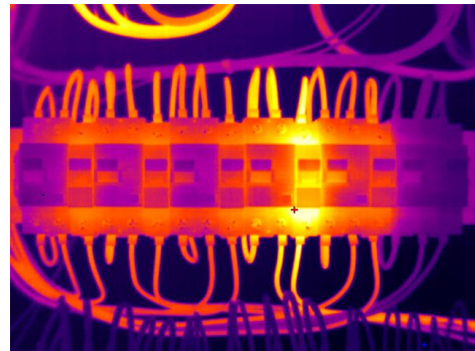
The higher the resolution of the detector, the more pixels and temperature points of the thermal image can be measured, and smaller targets can be measured and further distances can be observed.



160×120px



384×288px



640×480px

How to choose a Thermal Camera



How Far/How Small

How Clear

How Fast

Principles	The smaller the IFOV is, the smaller object and further distance can be measured	NETD determines the capability to distinguish tiny temp differences	Frame rate determines the speed camera captures the temperature changing and moving objects
Key Features	Resolution of the detector FOV IFOV	Temp Measurement Range Temp Measurement Accuracy Temp Measurement Sensitivity Resolution of the detector FOV IFOV	Frame Rate

Why choose Guide's Thermal Camera?

High Quality

Self-developed High Performance IR Detector

The self-developed uncooled infrared focal plane detector of high sensitivity and stable performance, which can quickly capture clear and delicate thermal images.

Superior Image Quality

Provides four image display modes of IR, Visible, Picture-in-Picture and MIF. The exclusive MIF multi-spectral image fusion patent technology supports the fusion of visible image details on the thermal image, which will enhance your observation experience and work efficiency.



IR



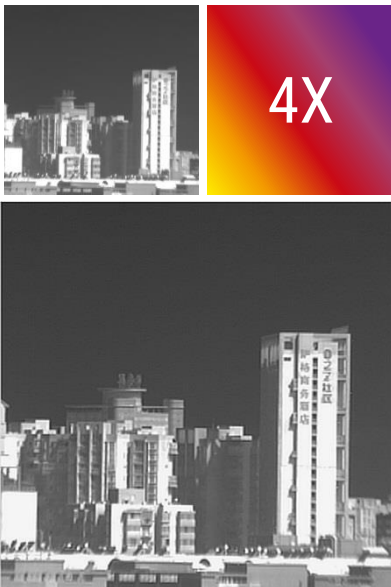
Visible



PIP



MIF



Super-resolution reconstruction

Super-resolution reconstruction is to enhance the resolution of the imaging system by a specific algorithm, which can increase the thermal image pixels by 4 times, and achieve high-quality thermal imaging effects.

Free and Simple Analysis Software

Free PC "IR Analyser" exclusive analysis software for professional analysis and post-processing; remote control and real-time sharing with Wi-Fi connectivity app "Thermography".

Stable Supply with Quality Assurance

With completely independent intellectual property rights, we obtained more than 200 domestic and foreign patents. We have strong R&D capacity and stable supply chain of our own, providing high technology IR thermal products with no export license restrictions.

Rugged and Reliable Product Design

With ergonomic design concept, Guide's product are easy to use and can also withstand drop, rugged and durable. All products have passed CE/FCC/ROHS certification, and the product quality is guaranteed.

CE FCC RoHS

Best Service



Customize Service

OEM/ODM: As the profound thermal imaging technology basis both in development and production, could provide clients in infrared industry OEM/ODM service.

Solution: Provide professional, effective, and convenient customize solution based on the client's requirements.



Pre-sale service

Consulting: Provide on-site demo demonstration and answer customer's questions professionally



Mid-sale service

Designs: Provide reasonable and complete solutions based on the requirement and application conditions.

Technical Instruction: The professional technical engineer will be specially assigned to give tech supports to the project's implementation all the time to guarantee the project's high quality.



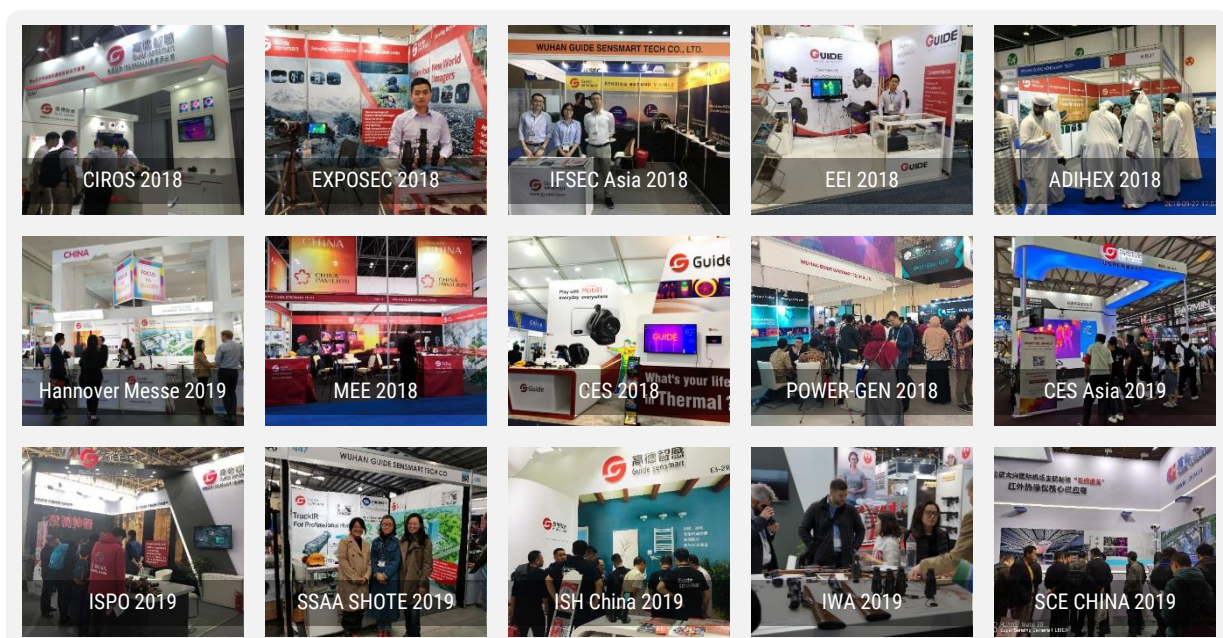
After-sale Service

Quality Warranty: Two year's quality warranty to the product, 6 months quality warranty to the accessories. Provide lifetime maintenance.

Free training: The calibration service and product training will be provided for free.

Global network: The subsidiaries company Eunir in Belgium and Guide Sensmart Tech GmbH in Germany are dedicated to provide much more effective service and technical support to the overseas clients.

Marketing and distributing over 70 countries in the world



MobIR Air Thermal Camera for Smartphone

Transform your smartphone into a thermal camera



Introduce

MobIR Air transforms the smartphone into a thermal camera. When connect it to a smartphone, the MobIR Air allows you to see the world which is invisible with your eyes. It can find and fix the HVAC issues quickly and accurately, detect building problems effectively and safely, test the electrical faults and it can be also used for patrol at night.

Name	MobIR Air
Resolution	120×90
Pixel size	17μm
Field	50°
Frame rate	25Hz
Power consumption	<150mW
Temp. Range	-20°C ~120°C
Weight	About 20g
Size	50mm×14mm×18mm
Color	Dark Grey Silver Golden
Interface	iOS: Lightning Android: USB Type-C



Plug and play
easy to use



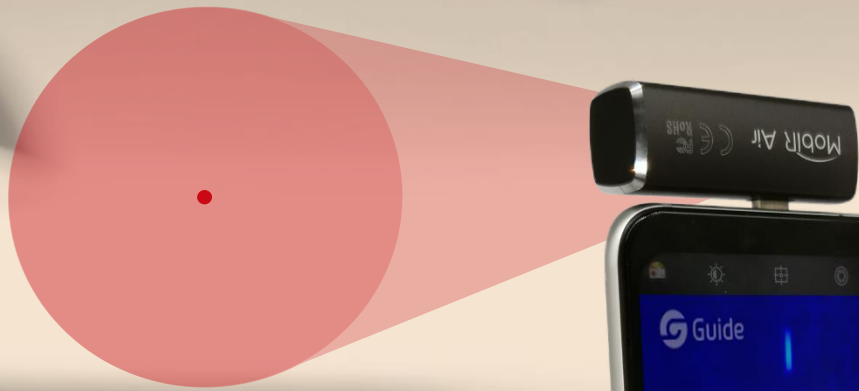
High frame rate
no image stuck



Tiny and
convenient



Low running
power no
battery required



For Traveling

- Find Hidden Camera

To protect your privacy while traveling



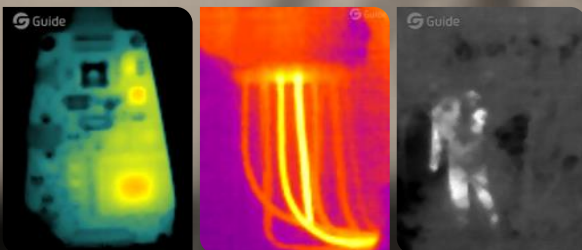
For Home

- HVAC Inspection
- Water Pipe Leak Detection
- Electrical Cabinet Inspection



For Work

- Electrical Board
- Computer Over-heat Detection
- Electronic Product Over-heat Test



MobIR 2 AutoFocus Thermal Imager for Smartphone

The World's First AutoFocus Thermal Imager for Smartphone



Introduce

MobIR 2 series is a new generation of infrared thermal imager for smartphone launched by Guide sensmart. Built-in the world's first autofocus WLP infrared module, with higher resolution and performance comparable to professional thermal imaging cameras. This product allows you to see things that you can't see with the naked eye, It can realize real-time temperature measurement, night vision, photography, video and other functions through the mobile phone APP. It is an all-round partner for your daily work, home life and adventure travel.

Features and Benefits

- o 256x192 resolution, Autofocus, Clearly no matter near or far.
- o Type-C interface, Battery-free design, plug and play.
- o $\pm 2^{\circ}\text{C}$ industrial-grade temperature measurement accuracy, comparable to professional testing tools.
- o Human temperature measurement mode supports simultaneous temperature measurement by multiple people, which is efficient and safety.
- o Outdoor night vision recognition range is more than 100 meters, farther and clearly.
- o Multifunctions, complete APP functions, share at any time

Application

- o House Inspection
- o Privacy Protection
- o Outdoor Night Vision
- o Fever Scanner
- o Evaluation tool
- o Scientific research

Specifications



Product model	MobIR 2T		MobIR 2S
Infrared detector			
Detector type	VOx		
Infrared resolution	256 × 192@12μm		
Wavelength range	7.5 to 14μm		
Frame rate	25 Hz		
Lens			
Focal length	3.2 mm	7 mm	
Field of view	56°	25°	
Focusing mode	Automatic / Electric		
Temperature measurement			
Measurement range	Industrial measurement: -20°C to 150°C; Human body: 20°C to 50°C		-20°C to 150°C
Measurement accuracy	Industrial measurement range: ±2°C or ±2%, whichever is greater; Human body: ±0.5°C (Temperature Measurement Distance: 0.5-2.5m)		±2°C or ±2%, whichever is greater
APP Functions			
Photo	Available		
Video	Available		
Power system			
Power consumption	500mW		
Environmental parameters			
Working temperature	-10°C ~60°C		
IP rating	IP43		
Drop	1m drop test (without the type-c interface)		
Certification	CE, FCC, RoHS		
Physical parameters			
External interface	USB Type-C male		
Weight	≤35 g	≤40 g	
Size (L × W × H)	59 × 24 × 16 mm	59 × 24 × 20 mm	
Color	Silver/Grey		
Standard	A device, Carrying box, Wrist strap, User manual, Certificate of approval		

T Series

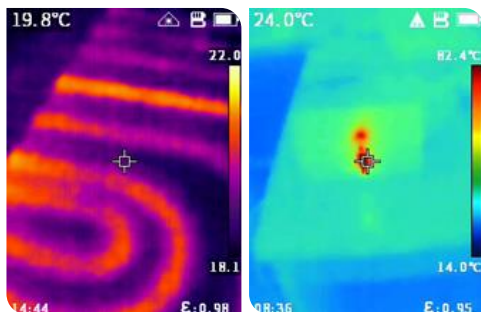
Entry-level Portable
Thermal Camera

See the heat of 10,800 pixels in 1 second



Introduce

T Series Entry-level Thermal Image Camera is an affordable temperature measuring tool widely used for building diagnostics, HVAC inspections, electrical system inspections and more. It perfectly overcomes the shortcomings of the single spot infrared thermometers and helps work smarter, safer and faster. Equipped with Guide's self-developed 120x90 WLP IR modules, T120 series thermal cameras can display radiometric data of 10,800 pixels instantly which helps quickly detect large areas and pinpoint fault spots accurately.



Features and Benefits

- Boot-up in 1 second
Boot up and display fully radiometric image instantly
Full screen max & min temperature alarm
- 2.4 inch Large Display
240x320 pixel Color LCD
- Good-handle Buttons
Ergonomic design
Easy to operate even wear the gloves
- 8-hour Battery Life
Low power consumption
Large capacity battery
- 2-hour Quick Charge
USB Type-C Interface
High power quick charge
- IR/Visible/Laser Indicator
Pinpoint targets precisely
- Trigger Button
Trigger button for photo taking
- Rugged Design
2-meter Drop Test, IP54
Encapsulation

Application

- Building Diagnostics
- HVAC Inspection
- Facilities maintenance
- Electrical Application

Specifications

Product model	T120		T120V
Imaging and optics			
Detector type	VOx		
Infrared resolution	120 × 90@17μm		
Wavelength range	7.5 to 14μm		
Focal length	2.28 mm		
Field of view	50° × 38°		
IFOV	7.46mrad		
Minimum object distance	0.5 m		
D:S	130:1		
NETD	≤60 mK		
Infrared frame rate	25 Hz / 9 Hz		
Focusing mode	Focus-free		
Measurement and analysis			
Measurement range	Support auto-switching: -20°C to 150°C, 100°C to 400°C		
Measurement accuracy	±2°C or ±2%, whichever is greater		
Analyzed target	Center spot and 3 areas		
Tracking / Alarm	Full screen maximum/minimum temperature tracking; The maximum or minimum temperature tracking of analyzed target; full screen temperature threshold alarm (image)		
Temperature measuring parameters	Emissivity, reflected temperature, target distance		
Image display			
Display screen	2.4" LCD		
Digital camera	/	70,000 pixels	
Image mode	IR	IR, VIS and PIP	
Image adjustment	Automatic		
Color palettes	Iron Red, White Hot, Arctic, Rainbow 2, Hot Iron, Rainbow 1		
Functions			
Shooting	Photo		
Storage and transmission			
Storage media	TF card (16 GB and up to 32 GB)		
Image storage	JPG with temp info		
External interface	TYPE-C, TF card slot, UNC ¼"-20 (tripod mounting)		
Laser	645~655nm, Class 2 laser, <1mW, only indicating the measured target		
WIFI	/	Yes, it can be connected to the mobile terminal for image transmission	
Power system			
Battery type	Rechargeable lithium-ion battery, non-removable		
Battery working time	≥8 hours	≥5 hours	
Power management	Timed shutdown and sleep mode		
Charging mode	TYPE-C charging; PC/portable charger; Capable of charging while using		
Charging time	90% of full charge in 2.5 hours		
Environmental parameters			
Working temperature	-10°C to 50°C		
Storage temperature	-40°C to 70°C		
IP rating	IP54		
Drop	2m drop test		
Certification	CE, FCC, ROHS, KCC, IP54, 2m drop test, Damp heat test, Vibration test, Shock test, Impact test, UN38.3, MSDS		
Physical parameters			
Weight	≤350 g		
Size (L × W × H)	194 × 61.5 × 76 mm		
Software kit	ThermoTools		
Standard	A device, Wrist strap, Quick Start Guide, Power adapter, Adapter plug, Type-C USB cable, Data download card, TF card (16 GB) , Certificate of approval		
Options	Tripod		

PC Series

Tool-like
Thermal camera

Clearer And Longer Operating



Introduction

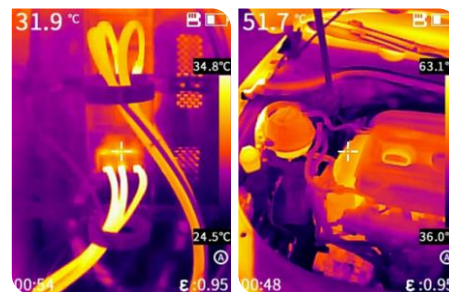
PC Series, Tool-like Handheld Thermal Camera, With excellent performance in image quality and charging battery life , This Thermal Camera adopts 256x192 IR Detector and 200W pixel visible light . Adopts the New SharpIR composite image enhancement technology, it can provide you with detailed infrared thermal imaging and dual-light fusion images to help you find potential faults more quickly.

Application

- Building Diagnostics
- HVAC Inspection
- Facilities maintenance
- Electrical Application

Features and Benefits

- Adopts 256x192 infrared module with Excellent imaging quality
- 16H Operating time, 2.5H fast charge, easy to cope with two days of work
- Turn on in 1 second And Use, full-frame temperature measurement
- Rugged and Durable, Resistant to 2 meters drop, IP54 Protection Rating
- 4 image modes, And all palettes can display the temperature
- Wide temperature measurement range, -20°C~550°C, Automatic Switch
- Type C interface, Easy to transfer data And support PC screen projection



Specifications

Product model	PC210	PC230
Imaging and optics		
Detector type	VOx	
Infrared resolution	256 × 192@12μm	
Wavelength range	7.5 to 14μm	
Focal length	3.2 mm	7 mm
Field of view	56° × 48°	25° × 19°
IFOV	3.75mrad	1.71mrad
Minimum object distance	0.3 m	0.5 m
D:S	266:1	585:1
NETD	≤45 mK	≤50 mK
Infrared frame rate	25 Hz / 9 Hz	
Focusing mode	Focus-free	Automatic
Measurement and analysis		
Measurement range	Support auto-switching: -20°C to 150°C, 100°C to 550°C	
Measurement accuracy	±2°C or ±2%, whichever is greater	
Analyzed target	Center spot and 3 areas	
Tracking / Alarm	Full screen maximum/minimum temperature tracking; The maximum or minimum temperature tracking of analyzed target; full screen temperature threshold alarm (image and flash)	
Temperature measuring parameters	Emissivity, reflected temperature, target distance	
Image display		
Display screen	2.4" LCD	
Digital camera	2 MP	
Image mode	IR, VIS, MIF and PIP	
Image adjustment	Automatic, semi-automatic, manual	
Color palettes	Iron Red, White Hot, Arctic, Rainbow 2, Hot Iron, Rainbow 1	
Functions		
Shooting	Photo	
Storage and transmission		
Storage media	TF card (32 GB)	
Image storage	JPG with temp info	
External interface	TYPE-C, TF card slot, UNC ¼"-20 (tripod mounting)	
Laser	645~655nm, Class 2 laser, <1mW, only indicating the measured target	
Power system		
Battery type	Rechargeable lithium-ion battery, non-removable	
Battery working time	≥16 hours	
Power management	Timed shutdown and sleep mode	
Charging mode	TYPE-C charging; PC/portable charger; Capable of charging while using	
Charging time	90% of full charge in 2.5 hours	
Environmental parameters		
Working temperature	-15°C to 50°C	
Storage temperature	-40°C to 70°C	
IP rating	IP54	
Drop	2m drop test	
Certification	CE, FCC, ROHS, KCC, IP54, 2m drop test, Damp heat test, Vibration test, Shock test, Impact test, UN38.3, MSDS	
Physical parameters		
Weight	≤375 g	
Size (L × W × H)	194 × 61.5 × 76 mm	
Software kit	ThermoTools	
Standard	A device, Wrist strap, Quick Start Guide, Power adapter, Adapter plug, Type-C USB cable, Data download card, TF card (32 GB) , Certificate of approval	
Options	Tripod	

P Series

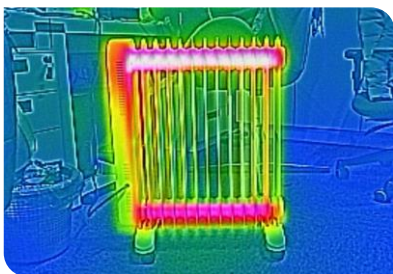
Pocket-sized
Thermal Camera

Compact Size, Professional Grade



Introduce

P120V Pocket-sized Thermal Camera designed for electrical equipment maintenance and building inspection, which can fast detect the potential problems, report repair data and share images by Wi-Fi. It is a truly handy thermal camera that fits in your pockets for fast and accurate thermal inspections anytime. P120V featured with 3.5-inch LCD touchscreen for simple operation, and support picture-in-picture, smooth zoom, max and min temperature alarm, Cloud Service and more.



Features and Benefits

- o -20°C-400°C wide measurement range
Auto switching between -20°C-150°C and 100°C-400°C
- o Reasonable Layout and Good Ergonomic Design
No interfere between lens area and grip area
- o 3.5" Touchscreen Display
High-brightness LCD, 320 x 240 pixels
- o Android Platform, Intelligent Operation
User-friendly design based on Android system, which is as simple as using a smartphone.
- o Wi-Fi connectivity , support Cloud Service
Wi-Fi connectivity enabled for remote control and instant sharing. And support Cloud Album, you can back up the images to the Cloud in real-time.

Application

- o Building Diagnostics
- o HVAC Inspection
- o Facilities maintenance
- o Electrical Application

Specifications

Product model	P120V
Imaging and optics	
Detector type	VOx
Infrared resolution	120 × 90@17μm
Wavelength range	7.5 to 14μm
Focal length	2.28 mm
Field of view	50° × 38°
IFOV	7.46mrad
Minimum object distance	0.5 m
D:S	130:1
NETD	≤60 mK
Infrared frame rate	15 Hz / 9 Hz
Focusing mode	Focus-free
Digital zoom	1.1x to 8x
Measurement and analysis	
Measurement range	Support auto-switching: -20°C to 150°C, 100°C to 400°C
Measurement accuracy	±2°C or ±2%, whichever is greater
Analyzed target	Spot × 1, Area × 1
Tracking / Alarm	Full screen maximum/minimum temperature tracking; The maximum or minimum temperature tracking of analyzed target; full screen temperature threshold alarm (image)
Temperature measuring parameters	Emissivity, reflected temperature, target distance
Image display	
Display screen	3.5" LCD
Digital camera	0.3 MP
Image mode	IR, VIS, MIF and PIP
Image adjustment	Automatic, semi-automatic, manual
Color palettes	White Hot, Black Hot, Iron Red, Hot Iron, Medical, Arctic
Functions	
Shooting	Photo
Storage and transmission	
Storage media	Local storage (4 GB)
Image storage	JPG with temp info
External interface	TYPE-C, UNC ¼"-20 (tripod mounting)
WIFI	Yes, it can be connected to the mobile terminal for image transmission
Power system	
Battery type	Rechargeable lithium-ion battery, non-removable
Battery working time	≥2 hours
Power management	Timed shutdown and sleep mode
Charging mode	TYPE-C charging; PC/portable charger; Capable of charging while using
Charging time	90% of full charge in 1.5 hours
Environmental parameters	
Working temperature	-10°C to 50°C
Storage temperature	-40°C to 70°C
IP rating	IP54
Drop	1m drop test
Certification	CE, FCC, ROHS, KCC, IP54, 1m drop test, Damp heat test, Vibration test, Shock test, Impact test, UN38.3, MSDS
Physical parameters	
Weight	≤240 g
Size (L × W × H)	133.1 × 87.4 × 24.1mm
Software kit	ThermoTools
Standard	A device, Wrist strap, Carrying bag, Quick Start Guide, Power adapter, Adapter plug, Type-C USB cable, Data download card, Certificate of approval
Options	Tripod

PF Series

Pocket-sized
Thermal Camera

Operating with great facility



Introduce

The PF Series pocket-sized thermal camera is a non-contact inspection tool for diagnosing problems and finding hidden deficiencies of electrical equipment, thanks to its 256 × 192 pixel infrared detector, -20°C to 550°C temperature range, 5 MP visible light camera and 3.5-inch LCD touchscreen. The extraordinary thermal imaging detail, easy operation and built-in Wi-Fi allow users to quickly and easily share the professional reports that document the problem.



Features and Benefits

- o The 256x192 infrared detector produces crisp imagery
- o The IR, VIS, PIP and MIF reveal temperature details
- o -20°C to 550°C temperature range with auto-switching capability
- o Laser ranging and intelligent area calculation of rectangle objects
- o Fast image lookback and search for desired functions
- o 4 hours of operation and standard Type-C for fast charging

Application

- o Electrical inspection
- o Automobile repair
- o Building diagnostics
- o HVAC detection

Specifications

Product model	PF210
Imaging and optics	
Detector type	VOx
Infrared resolution	256 × 192@12μm
Wavelength range	7.5 to 14μm
Focal length	3.2 mm
Field of view	56° × 48°
IFOV	3.75mrad
Minimum object distance	0.3 m
D:S	266:1
NETD	≤60 mK
Infrared frame rate	25 Hz / 9 Hz
Focusing mode	Focus-free
Digital zoom	1.1x to 8x
Measurement and analysis	
Measurement range	Support auto-switching: -20°C to 150°C, 100°C to 550°C
Measurement accuracy	±2°C or ±2%, whichever is greater
Analyzed target	Spot × 2 (Include Center spot), Area × 3
Tracking / Alarm	Full screen maximum/minimum temperature tracking; The maximum or minimum temperature tracking of analyzed target; full screen temperature threshold alarm (image and flash)
Temperature measuring parameters	Emissivity, reflected temperature, target distance
Image display	
Display screen	3.5" LCD
Digital camera	5 MP
Image mode	IR, VIS, MIF and PIP
Image adjustment	Automatic, semi-automatic, manual
Color palettes	White Hot, Black Hot, Iron Red, Hot Iron, Rainbow, Arctic
Functions	
Shooting	Photo
Others	Customized physical button×2
Storage and transmission	
Storage media	Local storage (16 GB)
Image storage	JPG with temp info
External interface	TYPE-C, UNC ¼"-20 (tripod mounting)
Laser	645~655nm, Class 2 laser, <1mW, indicating the measured target and laser ranging
WIFI	Yes, it can be connected to the mobile terminal for image transmission
Power system	
Battery type	Rechargeable lithium-ion battery, non-removable
Battery working time	≥4 hours
Power management	Timed shutdown and sleep mode
Charging mode	TYPE-C charging; PC/portable charger; Capable of charging while using
Charging time	90% of full charge in 2.5 hours
Environmental parameters	
Working temperature	-10°C to 50°C
Storage temperature	-40°C to 70°C
IP rating	IP54
Drop	1m drop test
Certification	CE, FCC, ROHS, KC, Anatel, IP54, 1m drop test, Damp heat test, Vibration test, Shock test, Impact test, UN38.3, MSDS
Physical parameters	
Weight	≤296 g
Size (L × W × H)	138 × 89 × 34.4 mm
Software kit	ThermoTools
Standard	A device, Wrist strap, Carrying bag, Quick Start Guide, Power adapter, Adapter plug, Type-C USB cable, Data download card, Certificate of approval
Options	Tripod

D Series

Intelligent
Thermal Camera

Intelligent Operation Affordable Price

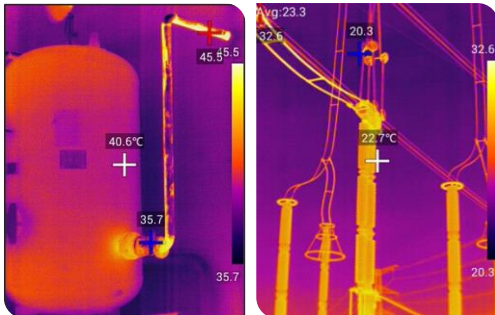


Introduce

D Series intelligent thermal camera is simple, compact and ergonomic. It equipped with 4-inch high-brightness touchscreen, Android operating system, user-friendly UI for easy operation. And every step has professional tips, so that the first user can become an expert quickly. With high IR resolution and various powerful functions, D series is the ideal thermal inspection tool for power inspection, equipment maintenance and building diagnostic applications.

Features and Benefits

- o 4" high light touch screen, all operation can be completed on the touch screen
- o You can choose the proper lens for different occasions
- o Built-in illuminator, take visible photos in the low lighting environment
- o Removable SD card, Up to 32G storage capacity
- o Wi-Fi communication, share IR images and findings immediately
- o Connected with mobile terminal to take IR photo, to achieve multi screen control



Application

- o Mechanical maintenance
- o Building diagnostic
- o Telecom equipment inspection
- o Electrical equipment inspection

Specifications

Product model	D192F		D192M		D384F		D384M		D384A	
Imaging and optics										
Detector type	VOx									
Infrared resolution	192 × 144@25μm				384 × 288@25μm					
Super resolution technology	/				Yes, Upgrade to 768 × 576					
Wavelength range	7.5 to 14μm									
Focal length	7 mm				19 mm				15 mm	
Field of view	38° × 29°				28° × 22°				35° × 27°	
IFOV	3.57mrad				1.32mrad				1.67mrad	
Minimum object distance	1 m		0.5 m		1 m		0.5 m		0.4 m	
D:S	289:1				775:1				625:1	
NETD	≤50 mK				≤45 mK				≤40 mK	
Infrared frame rate	25 Hz / 9 Hz									
Focusing mode	Focus-free		Manual		Focus-free		Manual		Automatic / Electric	
Digital zoom	1.1x to 4x									
Shot recognition	/		Manual		/		Manual		/	
Measurement and analysis										
Measurement range	-20°C to 350°C		-20°C to 150°C, 100°C to 650°C, Optional 650°C to 1500°C (High temperature lens is required)		-20°C to 350°C		-20°C to 150°C, 100°C to 650°C, Optional 650°C to 1500°C (High temperature lens is required)		-20°C to 150°C, 100°C to 650°C	
Measurement accuracy	±2°C or ±2%, whichever is greater									
Analyzed target	Spot × 5, Line × 2, Area × 5									
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)									
Isothermals	Available									
Temperature measuring parameters	Emissivity, reflected temperature, dew point, target distance, humidity									
Image display										
Display screen	4" LCD									
Digital camera	5 MP									
Image mode	IR, VIS, MIF and PIP									
Image adjustment	Automatic, semi-automatic, manual									
Color palettes	White Hot, Fulgurite, Iron Red, Hot Iron, Medical, Arctic, Rainbow 1, Rainbow 2									
Functions										
Shooting	Photo/Video								Photo (image stitching)/ Video	
Storage and transmission										
Storage media	Local storage (16 GB) and TF card (16 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	Micro USB, Micro HDMI, DC (12V) , TF card slot									
Laser	645~655nm, Class 2 laser, <1mW, only indicating the measured target									
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									
Bluetooth	/								Available	
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	5 hours									
Environmental parameters										
Working temperature	-10°C to 50°C									
Storage temperature	-40°C to 70°C									
IP rating	IP54									
Certification	CE, FCC, ROHS, KCC, Anatel, UN38.3, MSDS									
Physical parameters										
Weight	≤735 g (with battery)		≤840 g (with battery)		≤735 g (with battery)		≤840 g (with battery)		≤735 g (with battery)	
Size (L × W × H)	274 × 97 × 78 mm				274 × 110 × 78 mm				274 × 91 × 78 mm	
Software kit	ThermoTools									
Standard	A device, Wrist strap, Lithium-ion battery, Power adapter, Adapter plug, Micro USB cable, Micro HDMI cable, Quick Start Guide, Instructions, Data download card, Capacitive screen gloves, TF card (16 GB) , EPP case				A device, Wrist strap, Lithium-ion battery, Power adapter, Adapter plug, Micro USB cable, Micro HDMI cable, Quick Start Guide, Instructions, Data download card, Capacitive screen gloves, TF card (16 GB) , A carrying case				A device, Wrist strap, Lithium-ion battery, Power adapter, Adapter plug, Micro USB cable, Micro HDMI cable, Desktop charger, Tripod interface, Quick Start Guide, Instructions, Data download card, Capacitive screen gloves, TF card (16 GB) , A carrying case	
Options	Lithium-ion battery, Carrying bag, Desktop charger, Tripod interface, Tripod, Sunshade		Lithium-ion battery, Carrying bag, Desktop charger, Tripod interface, Tripod, Sunshade, Expanded lens		Lithium-ion battery, Carrying bag, Desktop charger, Tripod interface, Tripod, Sunshade		Lithium-ion battery, Carrying bag, Desktop charger, Tripod interface, Tripod, Sunshade, Expanded lens		Lithium-ion battery, Carrying bag, Tripod, Sunshade, Bluetooth headset	

PS Series

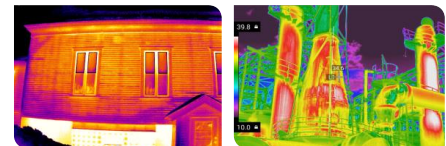
High Performance
Thermal Camera

Built For The Experts



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

- 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

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	

PT Series

HD High-Performance
Thermal Camera

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



Introduce

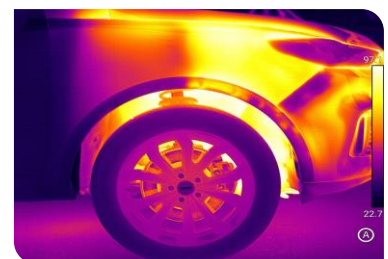
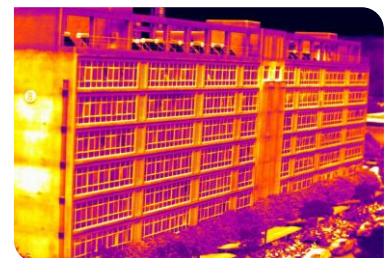
Guide PT Series is the world's first portable thermal camera with MP-level Infrared Resolution. Equipped with the self-developed 1280×1024 IR detector, this camera has the A/M-Focus manual and auto focusing system to provide much more crisp images. Advanced hardware, software and exceptional experience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

Features and Benefits

- Up to 1280×1024 IR resolution
- ContFocus intelligent and continuous autofocus model
- An optional temperature range to 2500°C for more applications
- Observation of 36µm objects through a macro lens
- IR video with temperature information at 20 Hz
- PerlRVision image stitching technology

Application

- | | |
|----------------------------------|----------------------------|
| ○ Electric Utilities Inspections | ○ Building Inspections |
| ○ Oil and Gas Maintenance | ○ 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	≤55mK					
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 boq, Tripod, Bluetooth earphone, 5G module					

Handheld Thermal Cameras Selection Guide



Series	T Series		PC Series		P Series	PF Series	D Series	
Model	T120	T120V	PC210	PC230	P120V	PF210	D192F	D384F
IR Resolution	120x90		256×192		120x90	256×192	192×144	384×288
NETD	60mk		45mK	50mK	60mk	60mk	50mk	45mk
FOV	50°×38°		56°×48°	25°×19°	50°×38°	56°×48°	37.8°×28.8°	28.4°×21.5°
Focal length	2.28mm		3.2mm	7mm	2.28mm	3.2mm	7mm	19mm
Focus	Focus-free		Focus-free	Automatic	Focus-free	Focus-free	Focus-free	
Visible Camera	N/A	70000 pixels	2MP		300000 pixels	5MP	5MP	
Display	2.4" LCD screen		2.4" LCD screen		3.5" LCD touch screen		4" highlight LCD touch screen	
Image Model	IR	IR,Visible,PIP	IR, Visible,PIP, MIF		IR, Visible,PIP, MIF			
Super-resolution	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES
level span	N/A	N/A	N/A	N/A	YES	YES	YES	YES
Panoramic Mosaic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature Range	-20°C-150°C, 100°C-400°C		-20°C-150°C, 100°C-550°C		-20°C-150°C, 100°C-400°C	-20°C-150°C, 100°C-550°C	-20°C~350°C	
Accuracy	±2°C or ±2%		±2°C or ±2%		±2°C or ±2%	±2°C or ±2%	±2°C or ±2%	
Measurement Spot	Center spot		Center spot	Center spot	1	2	5	
Measurement Line	N/A	N/A	N/A	N/A	N/A	N/A	2	
Measurement Area	3		3		1	3	5	
Storage	TF card 16G（up to 32G）		TF card 32G		4G	16G	TF card 16G（up to 32G）	
Laser pointer	YES	YES	YES	YES	N/A	YES	YES	YES
Laser rangefinder	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A
WIFI	N/A	YES	N/A	N/A	YES	YES	YES	YES
Bluetooth	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A

PC Analysis Software Professional & Full-featured

PC "ThermoTools" exclusive analysis software creates comprehensive analysis and processing of the infrared thermal image taken by the Guide Thermal Imaging Cameras, and realize unified management of data information. ThermoTools featured with user-friendly UI, powerful functions, and simplified operation and creates analysis reports automatically.

Various images/videos resources

- Wi-Fi SD card import
- FTP download
- USB transfer from camera internal storage
- Cloud file

Video Processing

- Live video stream or video replay
- Max/Min temperature tracking
- Add or delete analysis objects on video

Image Analysis

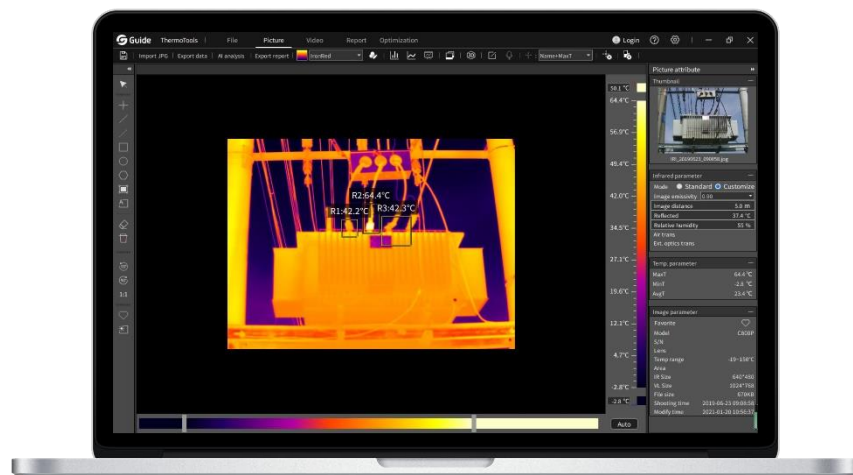
- Image enhancement such as image fusion, palette/level span adjustment etc.
- Various analysis objects add-ons such as spots, lines, areas, delta-T etc.
- 3D image display, histogram/temp profile presentation, image geographic info display
- Add text notes and voice notes

Report generating in PDF or WORD format

- A variety of professional report format pre-defined
- Edit freely in the pre-defined report format
- Customize your own preferred report format
- Submit the report to accomplish your inspection work

Preference settings

- Multi-languages selection
- Temp/distance unit setting
- File folder routine etc.



Mobile APP Smart & Convenient

With Wi-Fi connectivity, mobile APP “Thermography” let you import the images and videos from the cameras to your mobile devices (smartphones or tablets) for processing, analyzing, generating reports and sharing with others. It also enables remote control to compete the basic operations of the thermal camera on the mobile app, such as auto focus, digital zoom, shutter setting, image mode switching, color palettes switching and more.

Real-time Video Preview

Stream live video from the thermal camera, and realize full screen max and min temperature tracking.

Remote Control

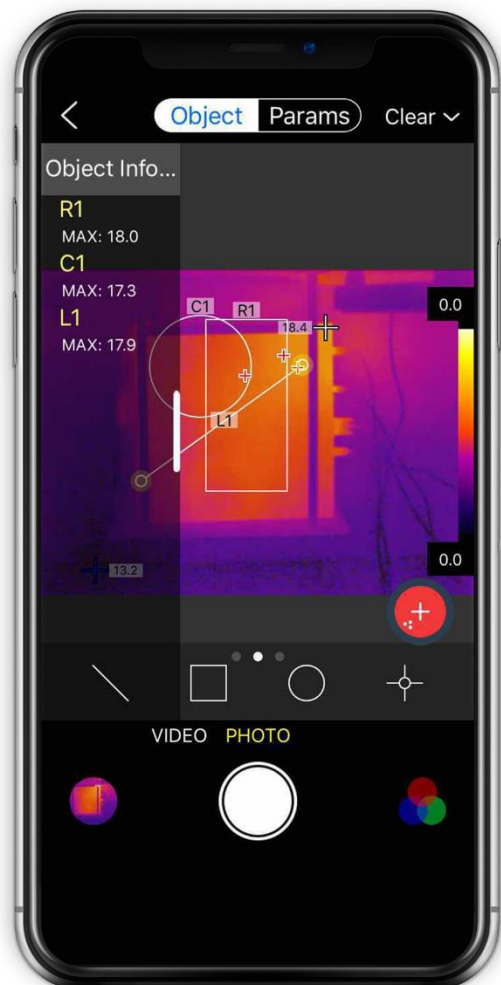
Control the thermal camera by mobile APP, such as adding analysis objects, taking photos, recordings, etc., can save pictures and videos to mobile albums.

Image Analysis and Editing

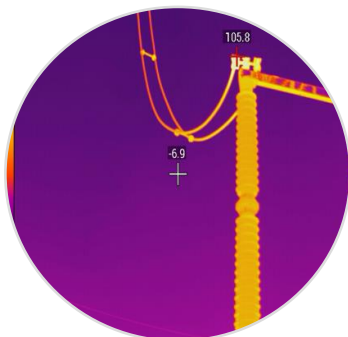
Analyze thermal images, add analysis objects, modify image information, add notes (include the text notes), photo notes, voice notes, and graffiti notes.

Report generation and sharing

Support generating PDF reports, sending emails, sharing and report printing for thermal images, etc.



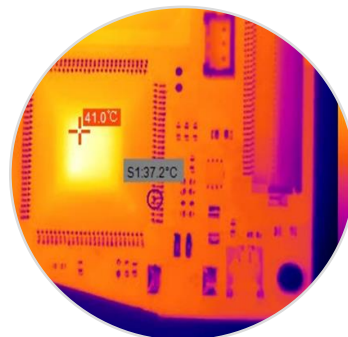
Applications



Power industry



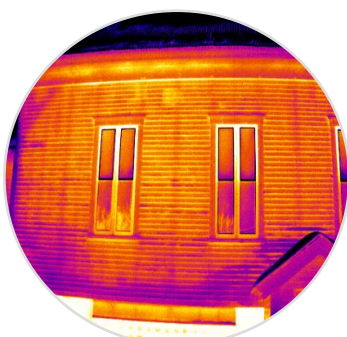
Environmental protection



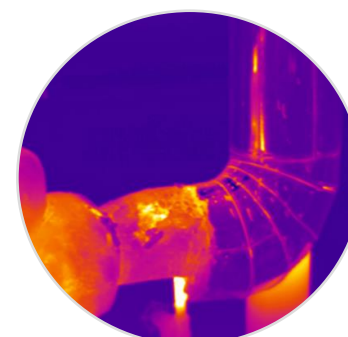
Industrial automation



Inspection and quarantine



Building diagnostic



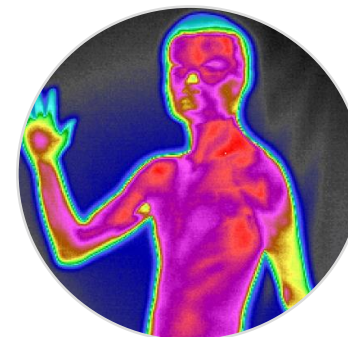
Petrochemical industry



Consumer electronics



Smart home



Medical