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# GUIDE SENSMART

## Professional **Tools** Thermal Imaging Cameras

CATALOG



Benefit the Public with  
Smart Sensing Technology



# COMPANY PROFILE

Wuhan Guide Sensmart Tech Co., Ltd., established in 2016, is dedicated to providing products and industry solutions with infrared thermal imaging technology as the core for global users.

Based on the advantages of low cost and batch production brought by self-developed infrared cores and more than 20 years of experience in infrared applications, Guide's products and solutions are widely used in electric power, industrial manufacturing, security monitoring, police law enforcement, outdoor night vision, scientific research, and medical care, etc.

## Top 2

Civil thermal imaging company

## 1,500,000 units

Annual output supported by six major lines

## 300+

long-time partners in over 70 countries

## 40%+

R&D personnel accounted for 40%



Guide Industrial Park  
—the leading full infrared industry  
chain development base in Asia



# COMPREHENSIVE STRENGTH



Based on the advantages of low cost and batch production brought by Guide Infrared's independent intellectual property rights of localized detectors, over 300 types of products have been developed independently and are widely used in nine traditional fields and several emerging fields.



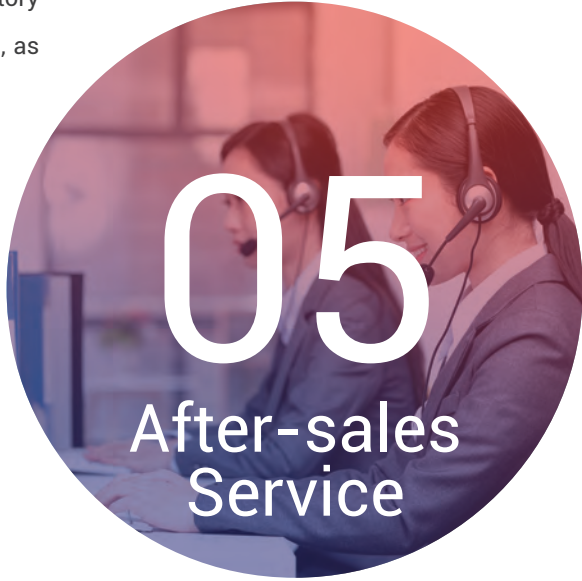
Guide has 200+ R&D staff with 70% of them having postgraduate degrees or above. The annual R&D investment accounts for about 10% of sales, increasing year by year. We have won 30+ trademarks, 160+ patents, and 80+ patents under the application. Parts of our products won many domestic and international heavyweight design awards such as IF Design Award and Gold Award for Excellent Industrial Design.



Guide obtained strict management system certification of  
ISO9001:2015  
ISO14001:2015  
ISO45001:2018  
IATF16949:2016  
We have also passed the international third-party factory inspection certification such as SGS, Intertek, BV, etc., as well as the ISV certification of Huawei.



Our whole production process is controlled automatically and has passed the environmental and safety certifications at home and abroad like the National Infrared Center and the FCC, etc., meeting the quality standards of different countries and areas.  
The total area of the production site is over 20,000 square meters with 4,500 square meters of production clean workshop. More than 10 infrared core and complete machine production lines are equipped, with an annual production capacity of more than 1,500,000 units.

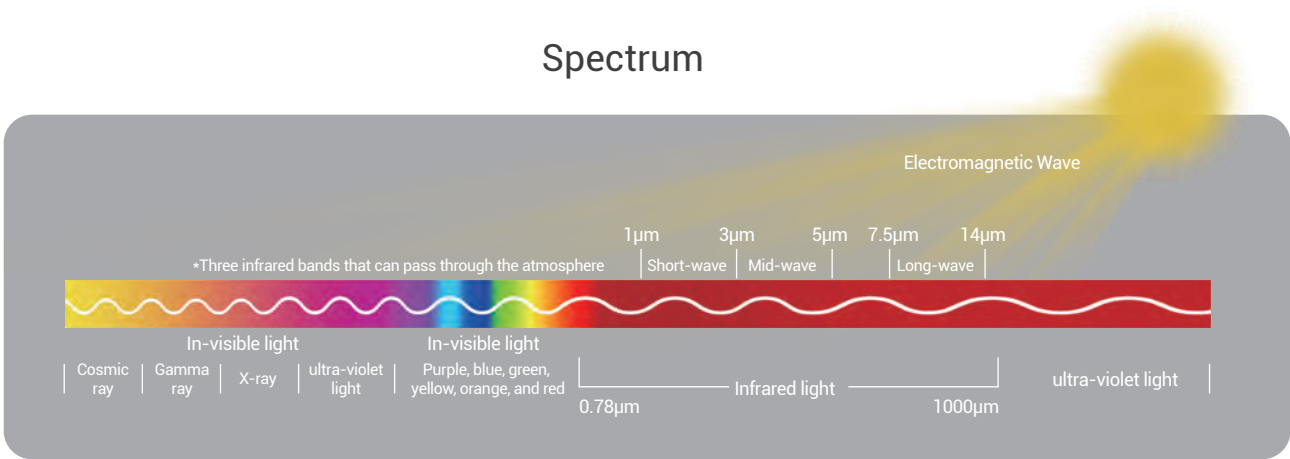
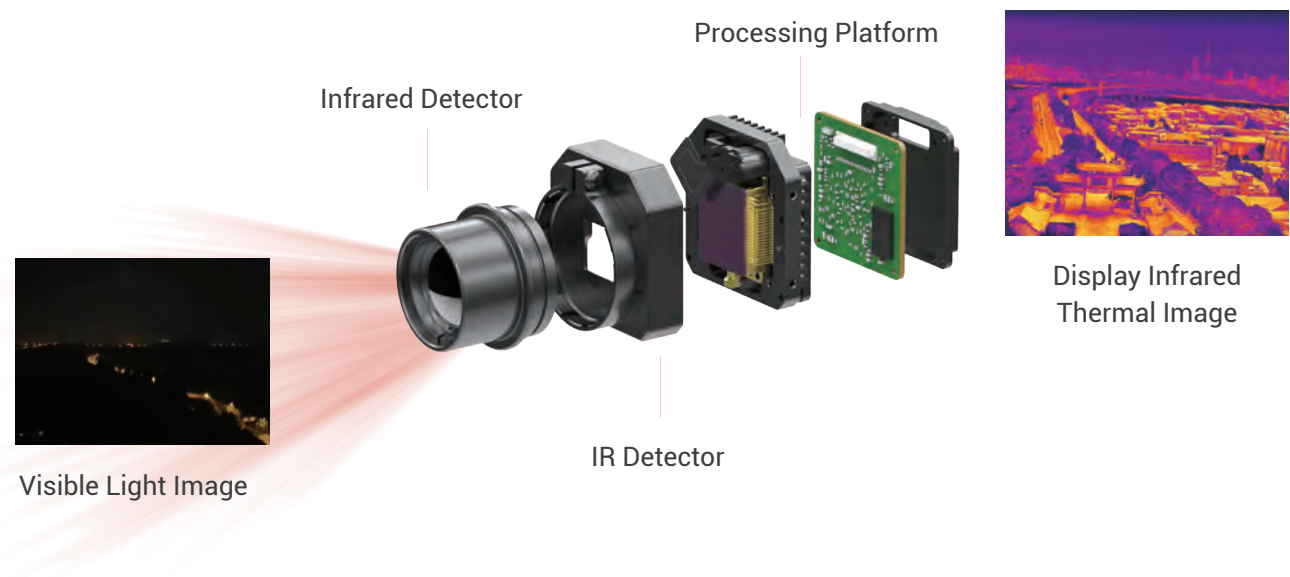


Guide has established a complete after-sales service system and promises to provide customers with fast, effective, professional, and high-quality after-sales service. We have established after-sales service sites in cities in China and after-sales centers in Germany and Belgium to serve customers in Europe and the United States.

# TECHNICAL PRINCIPLES

## Fundamentals

Any object that has a temperature above absolute zero (-273 degrees Celsius) emits infrared rays that are not visible to the naked eye, also known as thermal rays. Thermal imaging technology is the conversion of thermal radiation into a corresponding electrical signal, which is then amplified and processed to obtain a thermal image reflecting the heat distribution on the surface of the object.



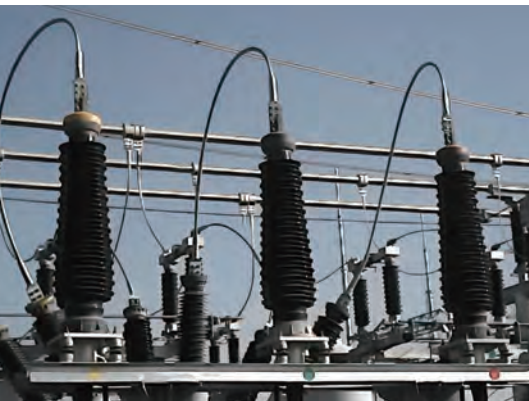
## Two Basic Applications

Thermal imaging technology is a kind of passive, non-contact detection and recognition technology whose two basic functions are temperature measurement and night vision.

### 01 Temperature measurement

long-range measurement for the target temperature distribution

- 1.Simple and intuitive
- 2.Safe and accurate
- 3.Efficient and time-saving
- 4.All-weather work



### 02 Night vision

Easy detection and identification of targets in the complete absence of light

- 1.All-weather work
- 2.No fear of harsh weather
- 3.Long range of action
- 4.Super stealthy





# THERMAL IMAGING APPLICATIONS

## Core Functions



Preventive maintenance



Non-destructive testing



Condition monitoring



Fault diagnosis



Leak locating



Fire point monitoring



Disease Screening



Hot spot tracking

## Applications

Industrial Monitoring	Steel Metallurgy	Machinery Electrical	HVAC	Intelligent Manufacturing
Energy Monitoring	Electricity	Petrochemical		
Security Monitoring	Perimeter Protection	Fire Monitoring		
Public Safety	Body Temperature Screening	Police Law Enforcement	Fire Fighting	
Sports & Life	Outdoor Sports	Smart Home	Smart Hardware	
Healthy Environment	Medical Health	Smart Farming		
Scientific Research	Scientific Research			

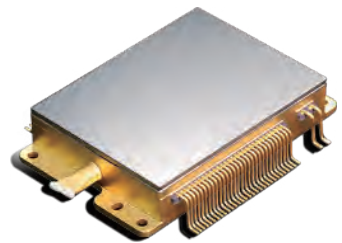




# THERMAL IMAGING ADVANTAGE

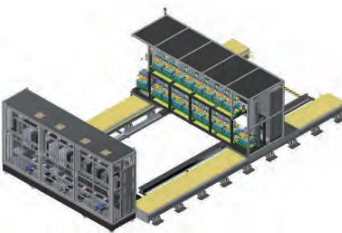
## The self-developed high-performance IR detector

Clear and delicate infrared images can be quickly captured by adopting a self-developed uncooled infrared focal plane detector with high sensitivity and stable performance. The annual production capacity of the detector can reach up to 6 million pieces with no export restrictions, which can ensure a stable supply.



## Automatic temperature calibration equipment

The fully automatic temperature calibration equipment designed and developed by Guide Sensmart for the field of infrared calibration technology covers an area of 170 square meters, mainly composed of four parts: smart lifting and lowering magnetic suspension body, mobile floor rails, black body placement rack and operation panel, with high system efficiency, temperature measurement accuracy, instrument utilization rate, etc.



## Nearly 200 patents

### - Invention patents/utility model patents/design patents

A thermal imaging monitoring method and its monitoring system

A human body inspection and quarantine system temperature automatic correction method

An automatic compensation method of human inspection and quarantine

system temperature based on environmental temperature

Method, device, apparatus, and system for detecting black body anomalies

for infrared thermography temperature measurement systems

Method, device, and apparatus for human inspection and quarantine

systems to avoid repeated alarms

Optical axis adjustable device and infrared core system

IR detector, and device for eliminating non-uniformity of imaging

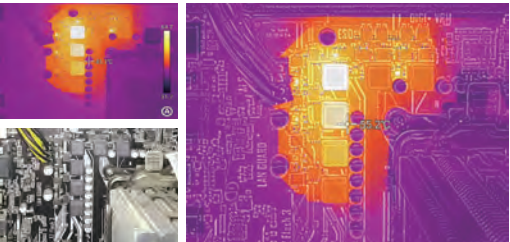
An infrared module package structure

A camera module assembly with temperature measurement function and handheld intelligent terminal



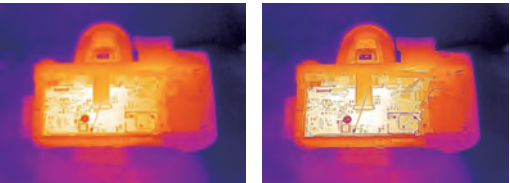
## MIFusion+ patented technology

It supports the fusion of visible image contour details on thermal images to improve image clarity and realizes the fusion effect of automatic matching of visible and infrared in real-time during the focusing process to enhance the observation efficiency.



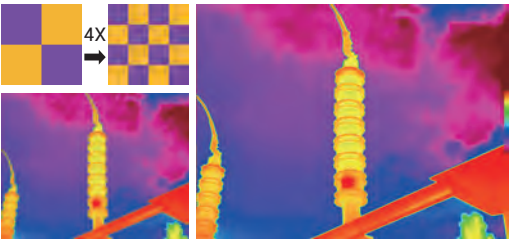
## TDE-TechIR image detail enhancement technology

Based on the unique image processing technology, the image noise is eliminated while the edges are enhanced, resulting in an image that reflects the details of the image well.



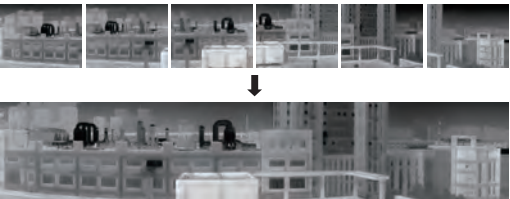
## IR-PerfclearSuper Resolution Reconstruction Technology

Deep learning-based single-frame image super-resolution reconstruction technology can increase the detail information of low-resolution images by specific algorithms so that the infrared image pixels to four times the original.



## PerIRVision Panoramic Stitching Technology

Using a standard lens to capture multiple images and based on feature point detection and matching, the temperature map can be stitched horizontally or in a nine-box grid, thus acquiring a large field-of-view image similar to a wide-angle shot.





# Transform your smartphone into a thermal camera

## MobIR Air Thermal Camera for Smartphones

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



### FEATURES

**Plug and play**  
Easy to use

**High frame rate**  
No image stuck

**Tiny and Convenient**

**Low running power**  
No battery required

## Fully Functional APP for Easy Sharing

Applicable to MobIR Air and MobIR 2 Series



WeChat



QQ



Weibo



Ins



FB



Twitter



iOS & Android



Index



Brightness/Contrast



Analysis Object



Shutter Compensation





# MobIR 2 Series

## AutoFocus ThermalImager for Smartphones

MobIR 2 series is a new generation of infrared thermal imagers for smartphones 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-around partner for your daily work, home life, and adventure travel.



### FEATURES

<b>NO.1</b> Autofocus, clear from near and far	<b>±2°C</b> Industrial-class accuracy for temperature measurement
<b>±0.5°C</b> Human temperature screening	<b>100m</b> Long-range outdoor night vision
<b>Type-C</b> Battery-free design, plug and play	<b>Efficient and Safe</b> Human temperature measurement mode for multiple simultaneous measurements

### PRODUCT PARAMETERS

Product model	MobIR 2T	MobIR 2S	MobIR 2S (Macro Lens)
Infrared detector			
Detector type	256×192 @12 μm WLP		
Infrared resolution	7.5~14μm		
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	
Macro function	/		Available*
APP Functions			
Photo/Video	Available		
Instant sharing	Images, videos		
Power system			
Power supply	4.5V to 5.5 V		
Power consumption	500 mW		
Environmental parameters			
Working temperature	-10°C to 60°C		
IP rating	IP43		
Certification	CE, FCC, RoHS		
Physical parameters			
External interface	USB Type-C male		
Weight	≤ 35 g	≤ 40g	≤ 50g
Size (L × W × H)	59 × 24 × 16 mm	59 × 24 × 20 mm	

### Full-featured, 2T/2S at your disposal

- ▶ **MobIR 2S**
  - 7mm lens, 100m night vision + conventional temperature measurement
  - Over 100 meters of outdoor night vision for seeing further and more clearly
  - Industrial-class accuracy of ±2°C for temperature measurement with a wide range of -20°C to +150°C
- ▶ **MobIR 2T**
  - 3.2mm lens, 100m night vision + conventional temperature measurement
  - Simultaneous human temperature screening for multiple people with an accuracy of ±0.5°C
  - Industrial-class accuracy of ±2°C for temperature measurement with a wide range of -20°C to +150°C





# See the Heat of 10800 Pixels in 1 Second

## T Series Entry-level Portable Thermal Camera

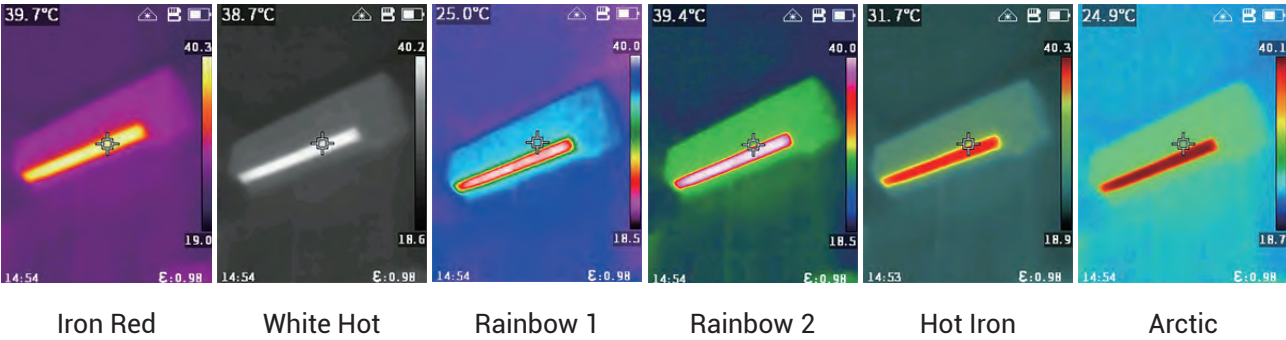
T Series Entry-level Thermal Image Camera is an affordable temperature measuring tool widely used for building diagnostics, HVAC inspections, electrical system inspections, etc. It perfectly overcomes the shortcomings of single-spot infrared thermometers and helps work smarter, safer, and faster. Equipped with Guide's self-developed 120 x 90 WLP IR modules, T 120 series thermal cameras can instantly display radiometric data of 10 800 pixels, which helps detect large areas and pinpoint fault spots accurately.



### FEATURES

<b>Boot up in 1 Second</b> Boot up and display a fully radiometric image instantly Full-screen max & min temperature alarm	<b>2.4-inch Large Display</b> 240x320 pixel color LCD
<b>Good-handle Buttons</b> Ergonomic design Easy to operate even wearing the gloves	<b>8h Battery Life</b> Low power consumption Large capacity battery
<b>2h Quick Charge</b> USB Type-C interface High power quick charge	<b>Rugged Design</b> 2-meter drop test IP54 Encapsulation

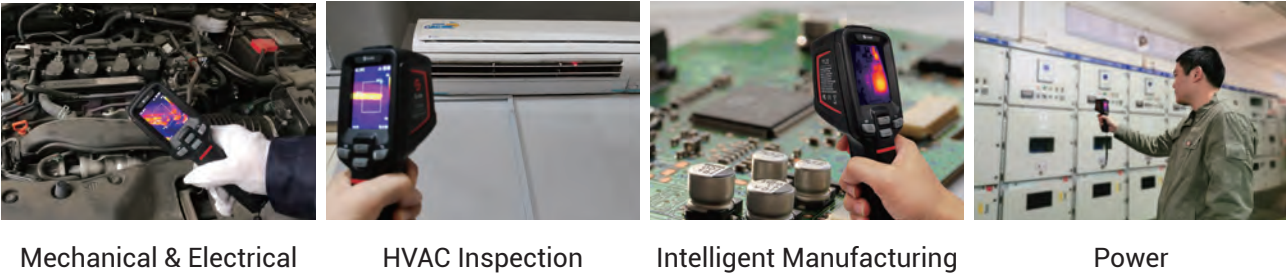
### SIX COLOR PALETTES



### PRODUCT PARAMETERS

Product model	T120	T120V
Detector type	VOx, 7.5 to 14μm	
Infrared resolution	120 × 90@17μm	
Infrared frame rate	25 Hz / 9 Hz	
Lens	2.28 mm/50° × 38°,Focus-free	
Measurement range	Support auto-switching: -20°C to 150°C, 100°C to 400°C	
Measurement accuracy	±2°C or ±2%, whichever is greater	
Display screen	2.4" LCD	
Digital camera	/	70,000 pixels
Image mode	IR	IR, VIS and PIP
Storage media	TF card (16 GB and up to 32 GB)	
Battery working time	≥8 hours	≥5 hours
Charging time	90% of full charge in 2.5 hours	
Drop	2m drop test	
Weight	≤ 350g	
Size (L × W × H)	194 × 61.5 × 76 mm	

### APPLICATION AREAS







Clearer  
and Longer Operating

# PC Series Tool-like Thermal camera

## FEATURES

- Excellent Imaging Quality**

256x192 wafer-level IR module  
Original SharpIR composite image enhancement technology
- Boot up in 1 Second**

Ready-to-use to improve detection efficiency
- 20°C to 550°C**

Wider temperature measurement range
- IP54**

Waterproof and dustproof

PC Series, Tool-like Handheld Thermal Camera, with excellent performance in image quality and charging battery life. This Thermal Camera adopts a 256 x 192 IR Detector and 200W pixel visible light. Adopting the New SharpIR composite image enhancement technology can provide you with detailed infrared thermal imaging and dual-light fusion images to help you find potential faults more quickly.

- 16h Super Long Battery Life**

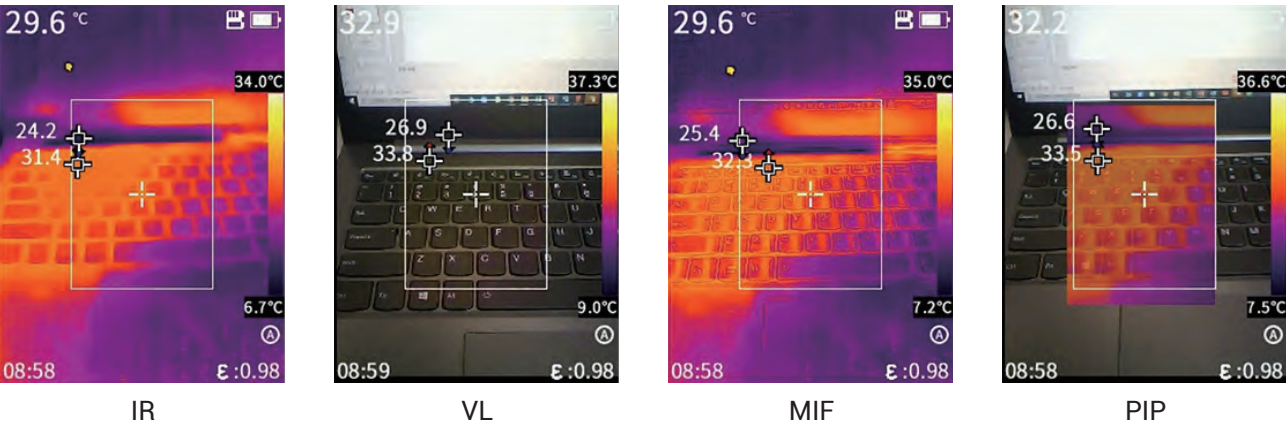
Easy to cope with two days of work even with a full inspection load
- Real-time Temperature Data Presentation**

Four image modes, all displaying temperature
- PC Screen Projection**

Type C interface, easy to transfer data
- Dual-Light Fusion**

Provide detailed thermal and dual-light fusion images

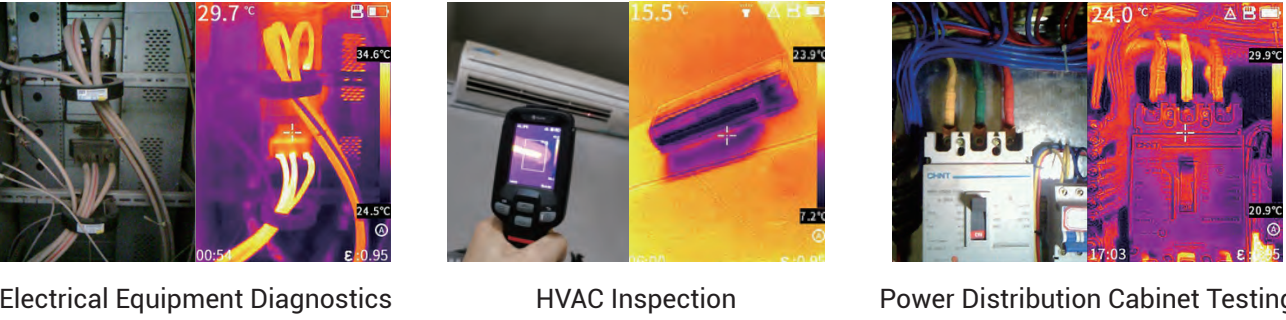
## FOUR IMAGE MODES



## PRODUCT PARAMETERS

Product model	PC210		PC230
Imaging and optics			
Detector type	VOx, 7.5 to 14μm		
Infrared resolution	256 × 192@12μm		
Infrared frame rate	25 Hz / 9 Hz		
Focal length	3.2 mm		7 mm
Field of view	56° × 48°		25° × 19°
Focusing mode	Focus-free		Automatic
Measurement range	Support auto-switching: -20°C to 150°C, 100°C to 550°C		
Measurement accuracy	±2°C or ±2%, whichever is greater		
Display screen	2.4" LCD		
Digital camera	2 MP		
Storage media	TF card (32 GB)		
Image storage	JPG with temp info		
Battery working time	≥16 hours		
Hardware	Laser Indicator, Illuminator		
Weight	≤ 375g		
Size (L × W × H)	194 × 61.5 × 76 mm		

## APPLICATION AREAS







Compact Size,  
Professional Grade

P Series  
Pocket-sized Thermal Camera

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



FEATURES

Wide Measurement Range

Auto switching between -20°C to 150°C and 100°C to 400°C

3.5-inch Touchscreen Display

High-brightness LCD, 320 x 240 pixels

Cloud Service

Log in to the cloud album via PC software or mobile app to analyze pictures remotely

Reasonable Layout and Good Ergonomic Design

No interference between the lens area and grip area

Intelligent Operation

User-friendly design based on the Android system, which is as simple as using a smartphone

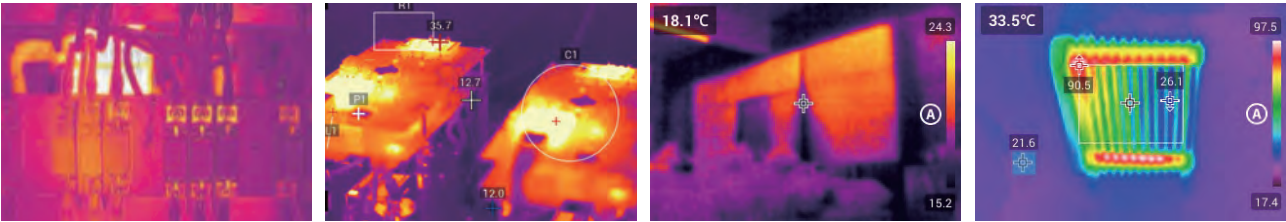
Compact and Lightweight

Pocket-sized for fast and accurate hermal inspections anytime

PRODUCT PARAMETERS

Product model	P120V
Imaging and optics	
Detector type	VOx, 7.5 to 14μm
Infrared resolution	120 × 90@17μm
Infrared frame rate	15 Hz / 9 Hz
Lens	2.28 mm/50° × 38°,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
Image display	
Display screen	3.5" LCD
Digital camera	0.3 MP
Image mode	IR, VIS, MIF and PIP
Functions	
Recording function	Photo
Cloud Services	Available
Storage and transmission	
Storage media	Local storage (4 GB)
WIFI	Yes, it can be connected to the mobile terminal for image transmission
Power system	
Battery working time	≥2 hours
Charging time	90% of full charge in 1.5 hours
Physical parameters	
Hardware	Illuminator
Weight	≤ 240g
Size (L × W × H)	133.1 × 87.4 × 24.1mm

APPLICATION AREAS



Electrical Equipment

Industrial Manufacturing

Building Diagnostics

HVAC Inspection





Operating with Great Facility

# PF Series

## Pocket-sized Thermal Camera

The PF Series pocket-sized thermal camera is a non-contact inspection tool for diagnosing problems and finding hidden deficiencies in 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

#### Crisp Imagery

Self-developed 256x192 IR detector

#### Four Image Modes

IR, VL, PIP, and MIF, all display temperature

#### Wide Measurement Range

-20°C to 550°C temperature range with auto-switching capability

#### Laser Ranging

Intelligent area calculation of rectangle objects

#### Control Upgrade

The fast image playback and search for desired functions

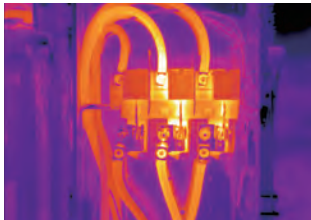
#### 4h Battery Life

Standard Type-C for fast charging

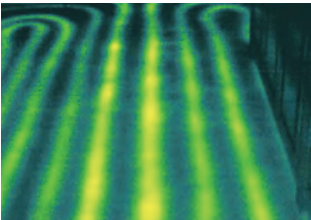
## PRODUCT PARAMETERS

Product model	PF210
Imaging and optics	
Detector type	VOx, 7.5 to 14μm
Infrared resolution	256 × 192@12μm
NETD	≤45mK
Infrared frame rate	25 Hz / 9 Hz
Lens	3.2 mm/56° × 48°, 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
Image display	
Display screen	3.5" LCD
Digital camera	5 MP
Image mode	IR, VIS, MIF and PIP
Functions	
Recording function	Photo
Others	Customized physical button×2
Storage and transmission	
Storage media	Local storage (16 GB)
WIFI	Yes, it can be connected to the mobile terminal for image transmission
Power system	
Battery working time	≥ 4hours
Charging time	90% of full charge in 2.5 hours
Physical parameters	
Hardware	Laser (Indication, Ranging), Illuminator
Weight	≤ 296g
Size (L × W × H)	138 × 89 × 34.4 mm

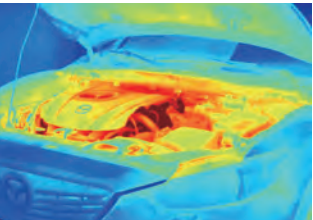
## APPLICATION AREAS



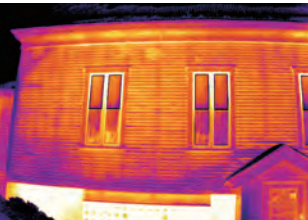
Electrical Equipment



HVAC Inspection



Auto Maintenance



Building Diagnostics



# Refresh the Temperature Record at 30Hz



## Hammer Series Intelligent Thermal Camera

With a built-in self-developed high-sensitivity IR detector with a maximum resolution of 640x480, a 13MP visible light camera, and 5 focusing modes, Hammer Series, the high-precision thermal camera designed specifically for the industrial field helps users intuitively view high-definition images and temperature details of the target, with the classic hammer shape. 30Hz infrared frame rate for fast and accurate access to more temperature data of moving targets, far beyond the same level of products.

### FEATURES

#### Clear Image

Self-developed IR focal plane detector with high sensitivity

#### Identified Hidden Hazards

ASIC algorithms for details

#### Dual-Light Fusion

A 13MP visible light camera with dual illumination lights

#### Video Analysis

IR video frame rate up to 30Hz

#### High Reliability

2-meter drop test, IP54 waterproof and dustproof

#### Efficient Transmission

Built-in 4G module for easy transfer of images to the cloud

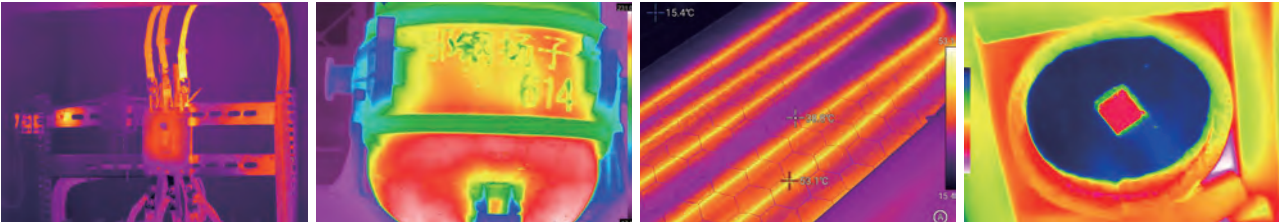
#### OTA Upgrade

OTA upgrade to keep the device in top shape

## PRODUCT PARAMETERS

Product model	H2	H3	H3+	H4	H6
Imaging and optics					
Detector type	VOx, 7.5 to 14μm				
Infrared resolution	256 × 192@12μm	320 × 240@12μm	384 × 288@12μm	480 × 360@12μm	640 × 480@12μm
NETD	≤45 mK				≤40 mK
Infrared frame rate	30 Hz / 9 Hz				
Focal length	10.5 mm			17.7 mm	
Field of view	25° × 19°				
Focusing mode	Manual / Automatic / Continuous autofocus				
Measurement and analysis					
Measurement range	Support auto-switching: -40°C to 150°C, 0°C to 650°C	Support auto-switching: -40°C to 150°C, 0°C to 650°C, Optional 500°C to 2000°C (High temperature lens is required)			
Measurement accuracy	±2°C or ±2%, whichever is greater				
Image display					
Display screen	4.3', 800×480 pixel touchscreen LCD				
Digital camera	5MP		8MP		13MP
Functions					
Recording function	Photo and video (infrared & visible light)		Photo (image stitching) and video (infrared & visible light)		
Others	Customized physical button, Intelligent diagnosis, OTA update				
Storage and transmission					
Storage media	Local storage (64 GB) and external SD card (64 GB and up to 256 GB)				
WIFI	Yes, it can be connected to the mobile terminal for image and real-time video transmission				
Power system					
Battery type	Lithium-ion rechargeable battery				
Battery working time	≥5 hours			≥4 hours	
Physical parameters					
Hardware	Laser (Indication, Ranging 0.1m to 40m), Illuminator, Microphone, Speaker, Electronic Compass, GPS				
Weight	≤1.15KG (with battery)				

## APPLICATION AREAS



Power Detection

Iron and steel metallurgy

HVAC Inspection

Electronic Information





# Rescue and Detection Grasp the Vitality of the Fire Scene

## PR Series Thermal Imaging Camera for Firefighting

### FEATURES

#### High Standard

Comply with national standard XF/T 635-2023

#### 640\*480 IR Resolution

for clear, delicate, and detailed thermal images

#### -20 °C to 2,000 °C Wide Measurement Range

Support temperature analysis and over-temperature alarm, etc.

#### 4.3-inch LCD Display

for better observation of the fire scene

The PR series dual-purpose thermal imaging camera for rescue and detection empowers a new perspective for firefighters. It combines high resolution, a large display screen, multiple scene modes, temperature analysis functions, and a strong protection rating, which can break through the limitations of harsh environments such as high temperatures, high humidity, and thick smoke in fire scenes to help firefighters see the surrounding environment quickly and clearly, locate the fire and search for trapped individuals more accurately, providing users with more efficient and safe fire visualization solutions.

#### Six Scene Modes

Basic fire-fighting, black and white, fire scene, search and rescue, thermal detection, and standard infrared

#### IP67 and 2-meter Drop

Function fully for up to 5min at 260°C

#### Interference-free Storage

One-click quick saving of images and videos with smooth storage

#### Simultaneous Transmission of Images

Optional 4G/5G HD module allow the scene picture to be sent directly to the command center

## PRODUCT PARAMETERS

Product model	PR410		PR430	
Imaging and optics				
Detector type	VOx, 7.5 to 14μm			
Infrared resolution	384×288@12μm		640×480@12μm	
NETD	≤45mK			
Frame rate	30Hz/9Hz			
Focal length	9mm			
Field of view	50°×37°			
Focusing mode	Focus-free			
Digital zoom	2x/4x/8x			
Measurement and analysis				
Measurement range	Support auto-switching: -20°C to 150°C, 0°C to 650°C, Optional 500°C to 2000°C (Aperture is required)			
Measurement accuracy	±2°C or ±2%, whichever is greater			
Tracking / Alarm	Full screen maximum and minimum temperature tracking; The maximum and minimum temperature tracking of analyzed target; full screen temperature threshold alarm (Vibration, Screen flicker, Buzzer)			
Image display				
Display	4.3" LCD, 800×480 Pixel			
Image mode	Basic fire fighting, Black and white, Fire scene, Search and rescue, Thermal detection, Standard			
Functions				
Recording function	Photo and Video			
Others	OTA update			
Storage and transmission				
Storage media	Local storage (128 GB)			
External interface	Type-C, Micro HDMI, UNC ¼"-20 (Tripod mounting)			
WIFI	Yes, it can be connected to the mobile terminal for image and real-time video transmission			
Power system				
Battery type	Lithium-ion rechargeable battery			
Operating time	≥4 hours			
Environmental parameters				
Working temperature	General Working temperature range: -10°C to +50°C; Specific Working temperature ranges: 80°C: 30 minutes, 120°C: 10 minutes, 260°C: 5 minutes			
IP rating	IP67			
Drop	2m drop test			
Certification	CE, FCC, ROHS, UL, UN38.3, MSDS, NFFE			
Physical parameters				
Weight	≤1.3kg (with battery)			

## APPLICATION AREAS



Fire Reconnaissance

Fire Extinguishing

Search And Rescue

Fire Inspection





# PS Series High-Performance Thermal Camera

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 provide 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

### Autofocus in 0.4 Second

A new generation of focus motors for one-touch intelligent autofocus

### Cloud Services

Remote analysis, upload local images to the cloud at any time

### Calibration-free Lens

Fast application to multiple scenes without returning to the factory, saving time and money

### 13MP Visible Light

Upgraded visible light camera for IR and visible light dual-channel video recording

### -40°C to 2000°C Temperature Range

Support automatic switching, suitable for more application scenarios

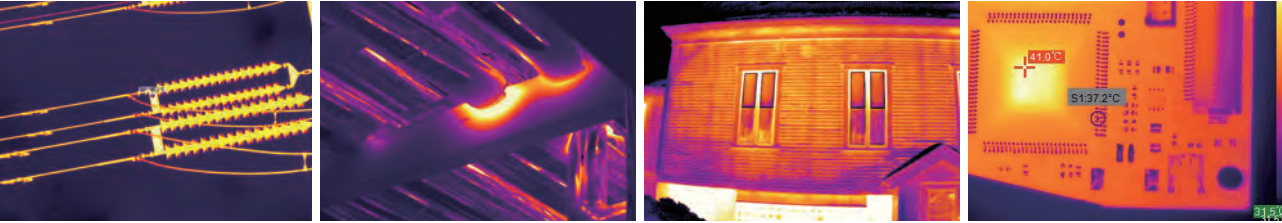
### Super-resolution Reconstruction

Increase the image detail information of low-resolution images for a high-quality imaging effect

## PRODUCT PARAMETERS

Product model	PS400	PS600	PS610	PS800
Imaging and optics				
Detector type	VOx, 7.5 to 14μm			
Infrared resolution	384 × 288@17μm	640 × 480@17μm		1024 × 768@12μm
Infrared frame rate	30 Hz / 9 Hz			25 Hz / 9 Hz
Focal length	15 mm	25 mm		28 mm
Field of view	25° × 19°			
Focusing mode	Automatic / Electric			
Digital zoom	1.1x to 10x	1.1x to 35x		
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	
Image display				
Display screen	5" LCD			
Eyepiece	1, 280 × 960 LCOS screen			
Digital camera	8 MP	13 MP		
Functions				
Recording function	Photo and video (infrared & visible light)	Photo (image stitching) and video (infrared & visible light)		
Storage and transmission				
Storage media	Local storage (64 GB) and SD card (64 GB and up to 128 GB)			
WIFI	Yes, it can be connected to the mobile terminal for image and real-time video transmission			
Cellular network	4G module (optional)			
Physical parameters				
Hardware	Laser (Indication, Ranging), Illuminator, Microphone, Speaker, Electronic Compass, GPS			
Battery working time	≥4 hours			≥3 hours
Weight	≤1.35 Kg (with battery)			≤1.5 Kg (with battery)
Size (L × W × H)	206 × 145 × 135 mm			206 × 169 × 135 mm

## APPLICATION AREAS



Power Detection

Petrochemicals

Building Diagnostics

Scientific Research





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

## PT Series HD High-Performance Thermal Camera

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 autofocus-ing system to provide much more crisp images. Advanced hardware, software, and exceptional experience ensure it is the flagship in this industry.

### FEATURES

- MP-level**

Up to 1280x1024 IR resolution
- Continuous Autofocus**

ContFocus intelligent and continuous autofocus model
- Ultra-wide Temperature Range**

Up to 2500°C equipped with a high-temperature lens

- Capture Vivid Details**

Observation of 36μm objects through a macro lens
- Dual-Light Video Recording**

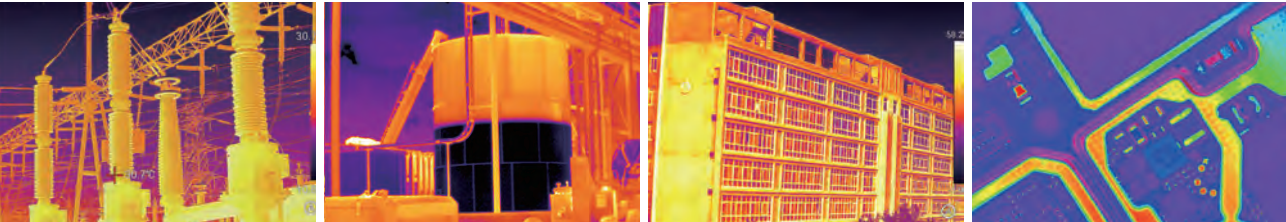
IR video with temperature information at 20 Hz
- PerIRVision image stitching technology**

Obtain a panoramic picture with an ultra-wide field of view

### PRODUCT PARAMETERS

Product model	PT650	PT850	PT870
Imaging and optics			
Detector type	VOx, 7.5 to 14μm		
Infrared resolution	640×512@12μm	1024 × 768@12μm	1280 × 1024@12μm
Infrared frame rate	30 Hz / 9 Hz		
Focal length	17 mm	28 mm	35 mm
Field of view	25° × 19°		
Focusing mode	Manual / Automatic / Continuous autofocus		
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		
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	
Functions			
Recording function	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)		
Cellular network	5G module (optional)		
Physical parameters			
Hardware	Laser (Indication, Ranging 0.1m to 35m), Illuminator, Microphone, Speaker, Electronic Compass, GPS, Status screen		
Battery working time	≥4 hours		
Weight	≤1.86Kg (with battery)		
Size (L × W × H)	191 × 171 × 118 mm		

### APPLICATION AREAS



Power Detection      Petrochemicals      Building Diagnostics      Scientific Research



# Handheld Thermal Cameras Selection Guide



Series	T Series		PC Series		P Series	PF Series	PS Series			
Model	T120	T120V	PC210	PC230	P120V	PF210	PS400	PS600	PS610	PS800
IR Resolution	120x90		256×192		120x90	256×192	384×288	640×480	640×480	1024×768
NETD	60mk		45mK	45mK	60mk	45mk	45mk	40mk	30mk	30mk
FOV	50°×38°		56°×48°	25°×19°	50°×38°	56°×48°	25°×19°			
Focal length	2.28mm		3.2mm	7mm	2.28mm	3.2mm	15mm	25mm		28mm
Focus	Focus-free		Focus-free	Automatic	Focus-free	Focus-free	Electric/ Automatic			
Visible Camera	N/A	70000 pixels	2MP		300000 pixels	5MP	8MP	13MP		
Display	2.4" LCD screen		2.4" LCD screen		3.5" LCD touch screen		5",1280×720 High Light Touch Screen			
Image Model	IR	IR,Visible,PIP	IR, Visible,PIP, MIF		IR, Visible,PIP, MIF		IR, Visible,PIP, MIF			
Super-resolution	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	YES	YES
level span	N/A	N/A	YES	YES	YES	YES	YES	YES	YES	YES
Panoramic Mosaic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	YES
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	-40°C~150°C,100°C~800°C, 700°C-2000°C (High temp lens is optional)			
Accuracy	±2°C or ±2%		±2°C or ±2%		±2°C or ±2%	±2°C or ±2%	±2°C~±2%		±1°C~±1%	
Measurement Spot	Center spot		Center spot		1	2	12	16	20	30
Measurement Line	N/A	N/A	N/A	N/A	N/A	N/A	12	16	20	30
Measurement Area	3		3		1	3	12	16	20	30
Storage	TF card 32G		TF card 32G		4G	16G	Built-in 64G, external SD card supports up to 64G			
Laser pointer	YES	YES	YES	YES	N/A	YES	YES	YES	YES	YES
Laser rangefinder	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	N/A
Bluetooth	N/A	N/A	N/A	N/A	N/A	YES	YES	YES	YES	YES
WIFI	N/A	YES	N/A	N/A	YES	YES	YES	YES	YES	YES
Cloud Services	N/A	N/A	N/A	N/A	YES	YES	YES	YES	YES	YES
OTA update	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Hammer Series					PR Series		PT Series		
H2	H3	H3+	H4	H6	PR410	PR610	PT650	PT850	PT870
256×192	320×240	384×288	480×360	640×480	384×288	640×480	640×512	1024×768	1280×1024
45mk	45mk	45mk	45mk	40mk	45mk	45mk	30mk	25mk	25mk
25°×19°					50°×37°		25°×19°		
10.5 mm			17.7mm		9mm		17mm	28mm	35mm
Manual / Auto / Continuous autofocus					Focus-free		Manual / Auto / Continuous autofocus		
5MP	5MP	8MP	8MP	13MP	N/A	N/A	8MP/13MP	8MP/16MP	
4.3" highlight LCD touch screen					4.3" LCD screen		5.5" LCD touch screen		
IR, Visible,PIP, MIF					6 modes including Basic fire fighting		IR, Visible,PIP, MIF		
YES	YES	YES	YES	YES	N/A	N/A	YES	YES	YES
YES	YES	YES	YES	YES	N/A	N/A	YES	YES	YES
N/A	YES	YES	YES	YES	N/A	N/A	YES	YES	YES
-40°C~150°C, 0°C~650°C	-40°C~150°C, 0°C~650°C, 500°C~2000°C(High temp lens is optional)				-20°C to 150°C, 0°C to 650°C, Optional 500°C to 2000°C (Aperture is required)		-40°C~150°C, 0°C~650°C, 400°C-2500°C (High temp lens is optional)	-40°C~150°C,0°C~800°C, 400°C-2500°C (High temp lens is optional)	
±2°C or ±2%					±2°C or ±2%		±1°C~±1%		
5	8	10	12	16	3		30	35	35
5	8	10	12	16	/	/	30	35	35
5	8	10	12	16	3		30	35	35
Built-in 64G, external SD card supports up to 256G					Local storage (128 GB)		Built-in 64G, external SD card supports up to 256G		
YES	YES	YES	YES	YES	N/A	N/A	YES	YES	YES
YES	YES	YES	YES	YES	N/A	N/A	YES	YES	YES
YES	YES	YES	YES	YES	N/A	N/A	YES	YES	YES
YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	N/A	N/A	YES	YES	YES
YES	YES	YES	YES	YES	N/A	N/A	YES	YES	YES



Download detailed parameter sheet



# PC-based analysis software

## ThermoTools

ThermoTools is a professional infrared analysis software designed for thermal engineers to analyze infrared thermal images and videos. ThermoTools enables data analysis from multiple dimensions, making infrared image and video analysis more intelligent, efficiently identifying thermal hazards. While ensuring safety, it also assists thermal imagers in achieving better results, becoming their most considerate partner.

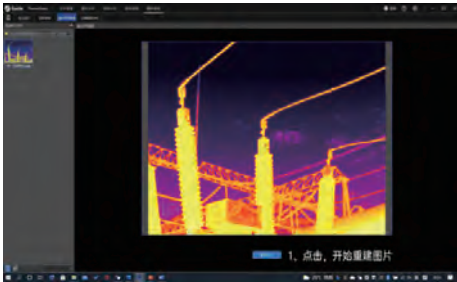
### Modular function interface

Seven modules, powerful functions at a glance, easy to use



### Super-resolution reconstruction

Increase the image detail information for a high-quality imaging effect with the pixel increased to 4 times the original



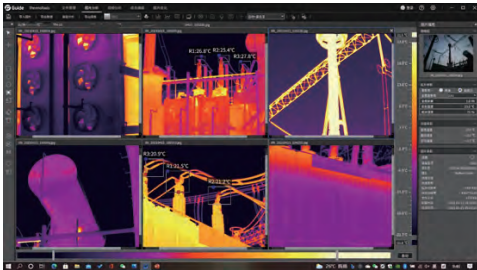
### Temperature trend analysis

Visualize temperature trends to predict the future direction; identify patterns and discover existing problems based on historical trends



### Batch analysis for time-saving and efficiency

6 windows for simultaneous editing and analysis of thermal images and quick batch export of reports after analysis is completed



### Cloud interconnection

Support cloud account import to download batch images for analysis remotely and synchronously for remote and efficient collaboration



### Customized analysis report

Users can customize the layout and style of reports to generate customized templates, expand the rich report style, and highlight the professional corporate image



# Mobile APP

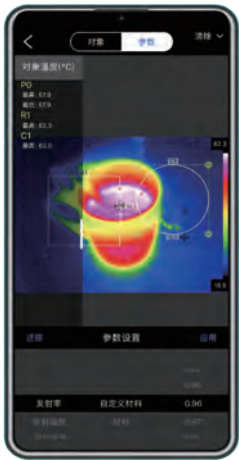
iOS & Android

## Thermography

Portable thermal camera exclusive mobile APP



Thermography



Connecting the device via Wi-Fi, you can import images or videos to a mobile device (phone or tablet) to process and analyze, generating inspection reports instantly and sharing them with others. You can also control the camera remotely, freeing your hands. All the basic operations of the camera can be performed on the mobile terminal, such as autofocus, electronic zoom, shutter action, image mode switching, color palette switching, etc.



### Real-time video preview

Watch the live image transmitted from the thermal camera and achieve full-screen maximum/minimum temperature tracking



### Remote control of the thermal camera

Send control commands to the camera, such as adding analysis objects, taking pictures, video recordings, etc., and save pictures and videos to the mobile album



### Thermal image analysis and editing

Analyze thermal images, add analysis objects, modify image information, and add annotations, including text, photo, voice, and graffiti annotations



### Report generation and sharing

Support generating PDF reports, sending emails, and sharing and printing reports on infrared images. sharing and report printing, etc.



WeChat



QQ



Weibo



Ins



FB



Twitter



# Comprehensive Product Service Support

Customer-centric, honest service



## Customized Services

OEM/ODM: Relying on the strong R&D and production strength, we provide OEM/ODM services for customers in the IR industry  
Solutions: Provide professional, efficient, and convenient customized solutions according to the special needs of customers in various industries



## Pre-sales Service

Consulting: Provide users with on-site product demonstrations and professional answers to technical questions about infrared products



## In-sales Support

Program design: According to user needs and objective conditions to provide reasonable and perfect project solutions  
Technical guidance: Professional technicians guide project implementation to ensure project quality

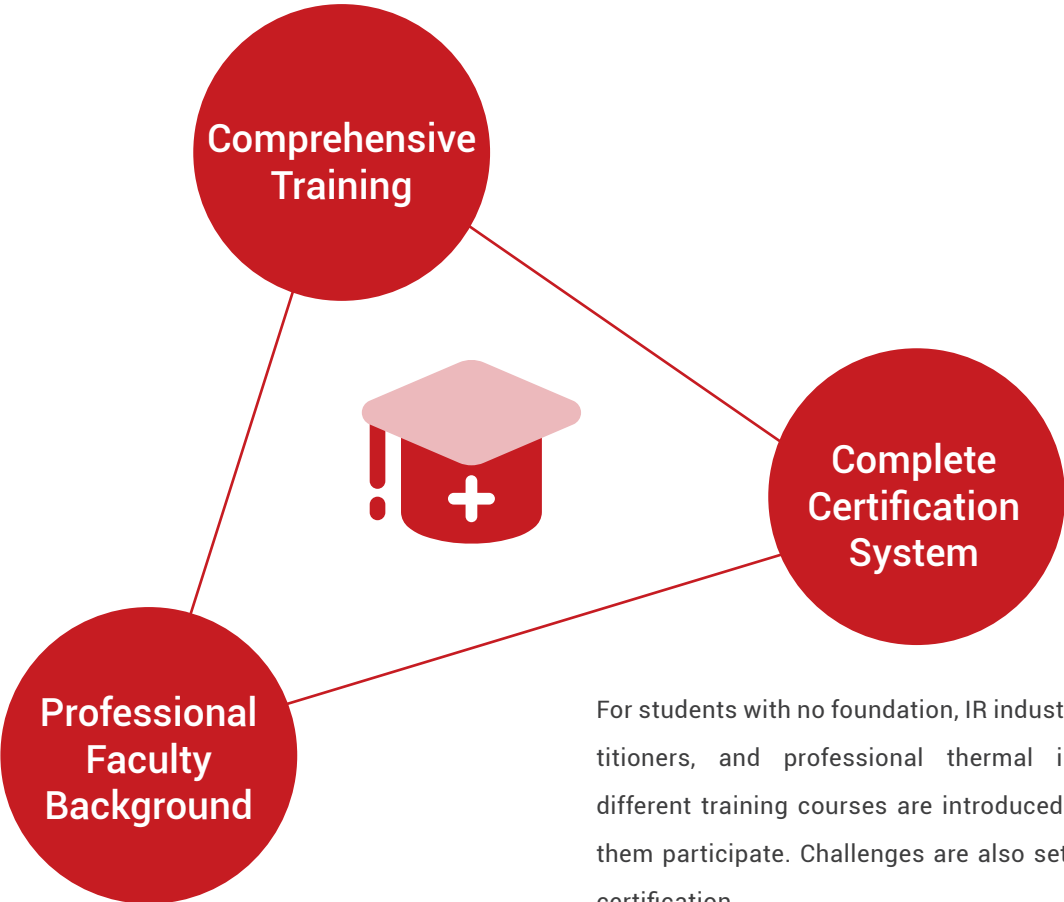


## After-sales Commitment

Quality assurance: One-year warranty for the whole machine and 6 months warranty for accessories from the date of sale, lifetime maintenance  
Free training: Provide free calibration business and application training services  
Nationwide coverage: Guide has established a complete after-sales service network in all provinces and cities in China  
Global service: We have set up branches in Belgium and Germany, dedicated to providing better service for overseas customers

# Guide Sensmart Training and Certification Center

Guide Sensmart Training and Certification Center is a training, education, and certification service platform for Guide corporate users, eco-partners, and IR industry practitioners, providing professional training and certification in the fields of thermal imaging mechanism, product operation, thermodynamics, radiology, product application, etc.



For students with no foundation, IR industry practitioners, and professional thermal imagers, different training courses are introduced to help them participate. Challenges are also set for the certification.

Relying on twenty years of experience in IR industry applications, Guide Sensmart combines theory and practice to train professional thermal imagers who are proficient in thermal imaging technology and can efficiently solve problems, committed to promoting the development and progress of the IR industry.