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Product pictures and technical specifications are subject to change without prior notice.



# **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

300+

long-time partners in over 70 countries

# 1,500,000 units

Annual output supported by six major lines

40%+

R&D personnel accounted for 40%



# **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

IS09001:2015

IS014001:2015

IS045001:2018

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.

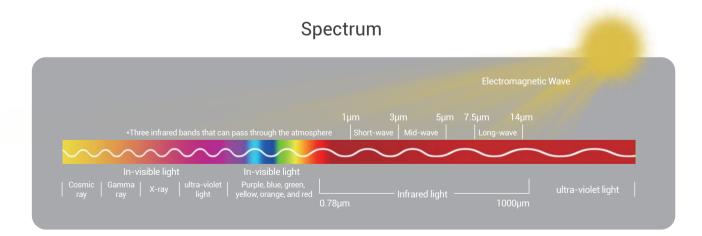
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# TECHNICAL PRINCIPLES

## **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.

# 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







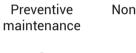


# **THERMAL IMAGING APPLICATIONS**

# **Core Functions**



Preventive





Leak locating



Non-destructive testing



Fire point monitoring



Condition monitoring





Disease



Screening



Fault diagnosis



Hot spot tracking

# **Applications**

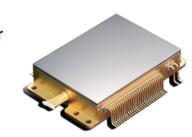
Industrial Monitoring	Steel Metallurgy	Machinery Electrical	HVAC	Intelligent Manufacturing	
Energy Monitoring	Electricity	Petrochemical			
Security Monitoring Perimeter Prote		Fire Monitoring			
Public Safety Body Temperature Screening		Police Law Enforcement	Fire Fighting		
Sports & Life Outdoor Sports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



# THERMAL IMAGING ADVANTAGE

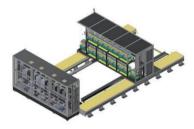
#### The self-developed high-performance IR detector

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

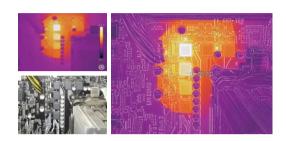
A camera module assembly with temperature measurement function and handheld intelligent terminal

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## 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 enhancementtechnology

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.





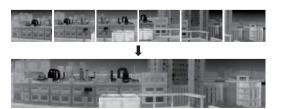
# IR-PerfclearSuper Resolution Reconstruction Technology

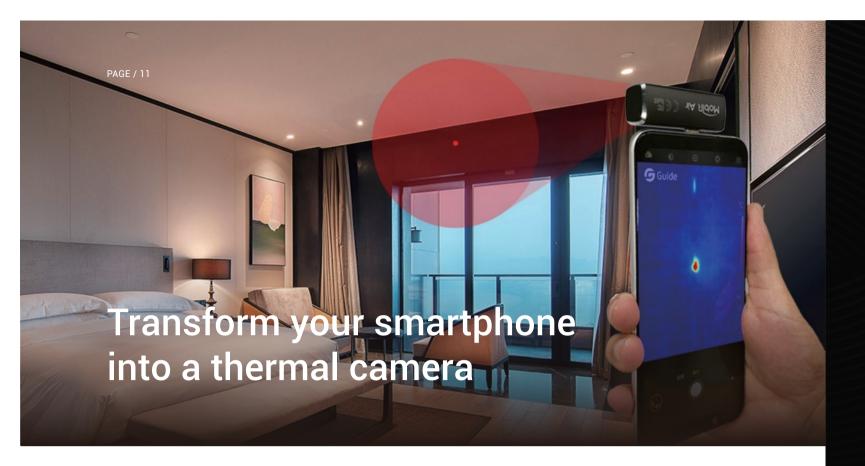
Deep learning-based single-frame image super-resolution reconstruction technology can increase the detail information of low-resolution images by specific algorithms so that the infrared image pixels to four times the original.



# 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.





# **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







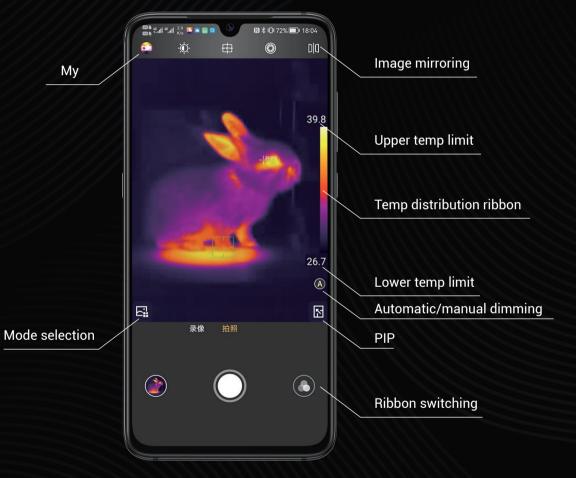


Ins





Twitter



iOS & Android



Index



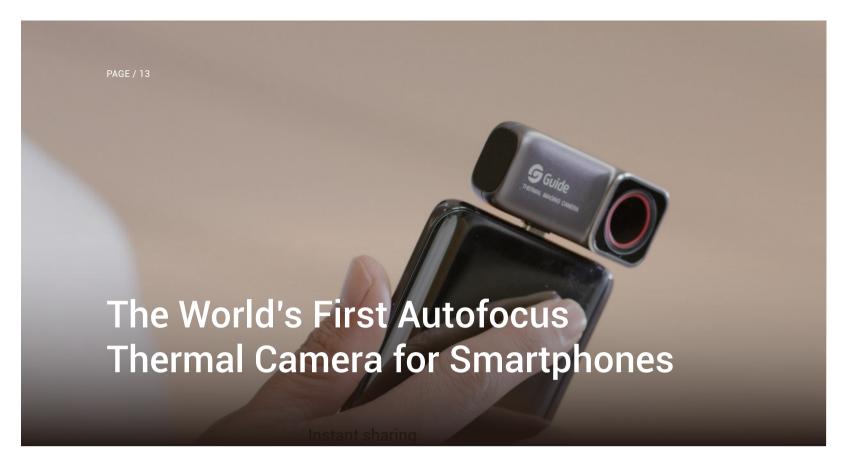
Brightness/Contrast





Analysis Object

**Shutter Compensation** 



# **MobIR 2 Series**

# **AutoFocus Thermallmager 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**

Ν	ı	C	).	1

Autofocus, clear from near and far

#### ±0.5°C

Human temperature screening

#### Type-C

Battery-free design, plug and play

#### ±2°0

Industrial-class accuracy for temperature measurement

#### 100m

Long-range outdoor night vision

#### **Efficient and Safe**

Human temperature measurement mode for multiple simultaneous measurements

Wuhan Guide Sensmart Tech Co., Ltd.,

#### **PRODUCT PARAMETERS**

Product model	MobIR 2T	MobIR 2S	MobIR 2S (Macro Lens)				
Infrared detector	WODIK 21	Wobin 25 (Macro Lens)					
	256v102 @12 um WII D						
Detector type Infrared resolution	256×192 @12 μm WLP						
		7.5~14µm					
Frame rate		25 Hz					
Lens		_					
Focal length	3.2 mm		nm				
Field of view	56°		5°				
Focusing mode		Automatic / Electric					
Temperature measuren							
Measurement range	Industrial measurement: -20°C to 150°C; -20°C to 150°C Human body: 20°C to 50°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 paramet	ters						
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	≤ 50g					
Size (L × W × H)	≤ 35 g ≤ 40g ≤ 50g 59 × 24 × 16 mm 59 × 24 × 20 mm						

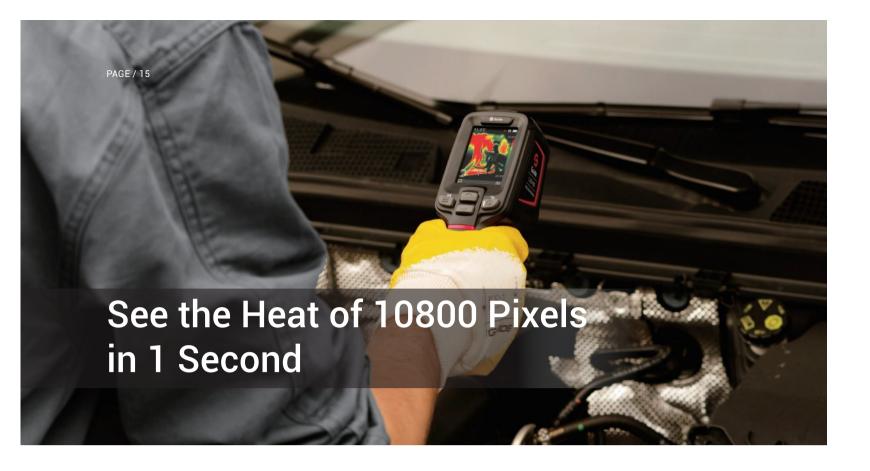
## Full-featured, 2T/2S at your disposal

#### 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



# **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**

#### Boot up in 1 Second

Boot up and display a fully radiometric image instantly Full-screen max & min temperature alarm

#### **Good-handle Buttons**

Ergonomic design
Easy to operate even wearing the gloves

#### 2h Quick Charge

USB Type-C interface
High power quick charge

#### 2.4-inch Large Display

240x320 pixel color LCD

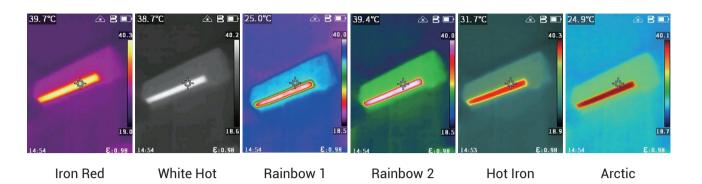
#### 8h Battery Life

Low power consumption Large capacity battery

#### Rugged Design

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	0@17μm				
Infrared frame rate	25 Hz	/ 9 Hz				
Lens	2.28 mm/50° × 3	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 a	nd up to 32 GB)				
Battery working time	≥8 hours	≥5 hours				
Charging time	90% of full charg	ge in 2.5 hours				
Drop	2m drop test					
Weight	≤ 38	50g				
Size (L × W × H)	194 × 61.5	5 × 76 mm				

## **APPLICATION AREAS**







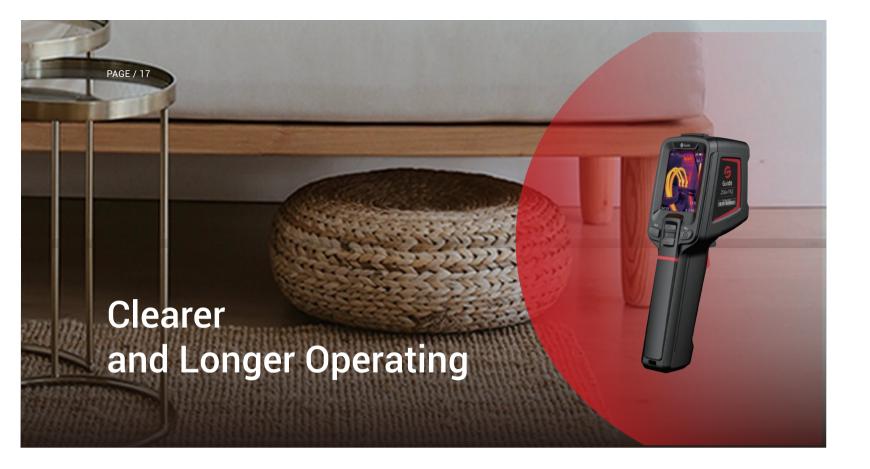


Mechanical & Electrical

**HVAC Inspection** 

Intelligent Manufacturing

Power



# 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

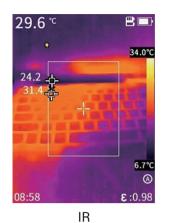
#### **PC Screen Projection**

Type C interface, easy to transfer data

#### **Dual-Light Fusion**

Provide detailed thermal and dual-light fusion images

#### **FOUR IMAGE MODES**





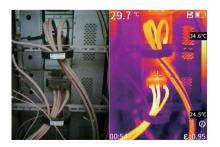


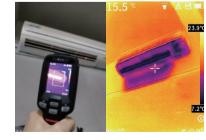


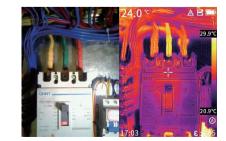
## **PRODUCT PARAMETERS**

Product model	PC210	PC230				
Imaging and optics	1 0210	1 0230				
	VOx, 7.5	to 14um				
Detector type	<u> </u>	•				
Infrared resolution	256 × 19.	2@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%, whic	±2°C or ±2%, whichever is greater				
Display screen	2.4"	LCD				
Digital camera	21	MP				
Storage media	TF card	(32 GB)				
Image storage	JPG with	temp info				
Battery working time	≥16 h	≥16 hours				
Hardware	Laser Indicato	Laser Indicator, Illuminator				
Weight	≤ 3°	75g				
Size (L × W × H)	194 × 61.5	5 × 76 mm				

#### **APPLICATION AREAS**



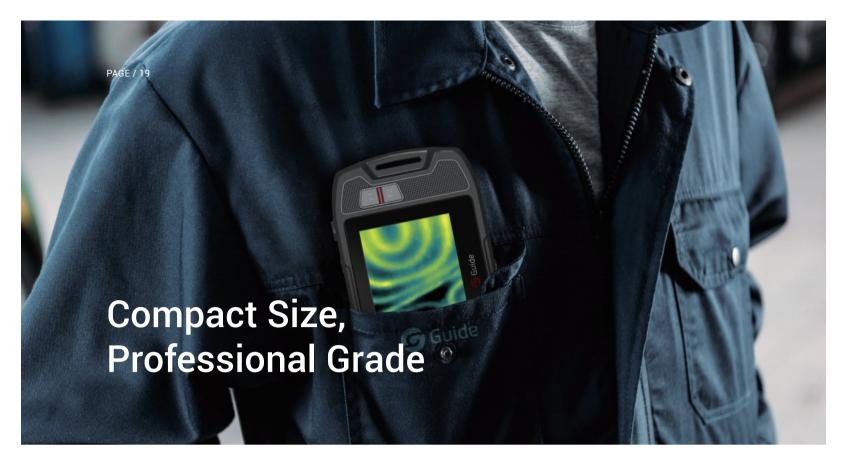




**Electrical Equipment Diagnostics** 

**HVAC Inspection** 

Power Distribution Cabinet Testing



# **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

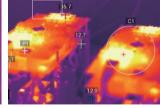
Pocket-sized for fast and accurate hermal inspections anytime

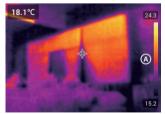
#### **PRODUCT PARAMETERS**

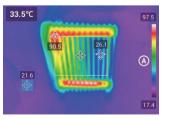
Product model	P120V
Imaging and optics	
Detector type	VOx, 7.5 to 14μm
Infrared resolution	120 × 90@17μm
Infrared frame rate	15 Hz / 9 Hz
Lens	2.28 mm/50° × 38°,Focus-free
Digital zoom	1.1x to 8x
Measurement and analysis	
Measurement range	Support auto-switching: -20°C to 150°C, 100°C to 400°C
Measurement 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**









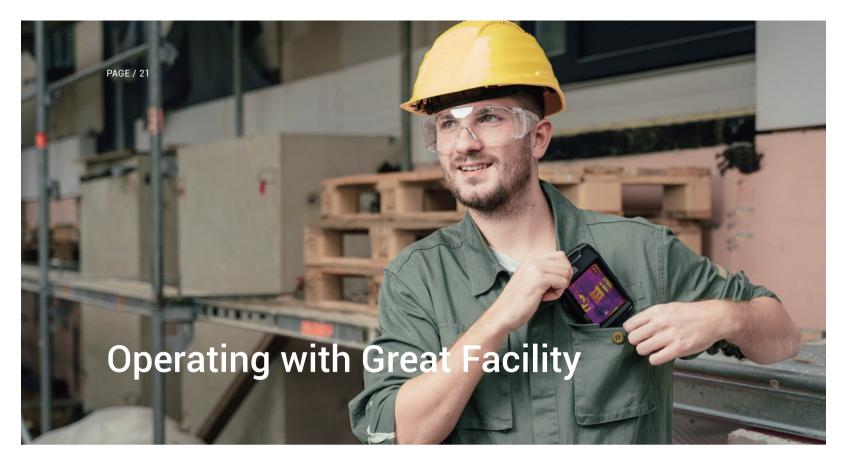
Electrical Equipment

Industrial Manufacturing

**Building Diagnostics** 

**HVAC Inspection** 

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# **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

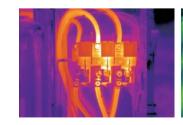
#### 4h Battery Life

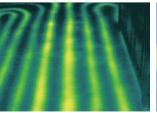
Standard Type-C for fast charging

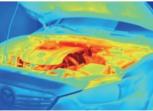
### **PRODUCT PARAMETERS**

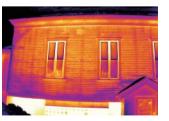
Product model	PF210
Imaging and optics	
Detector type	VOx, 7.5 to 14μm
Infrared resolution	256 × 192@12μm
NETD	≤45mK
Infrared frame rate	25 Hz / 9 Hz
Lens	3.2 mm/56° × 48°, Focus-free
Digital zoom	1.1x to 8x
Measurement and analysis	
Measurement range	Support auto-switching: -20°C to 150°C, 100°C to 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**







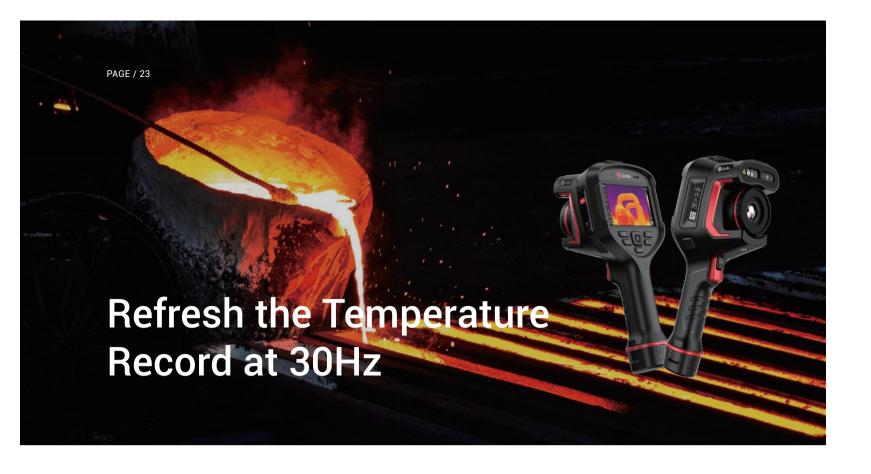


Electrical Equipment

**HVAC Inspection** 

Auto Maintenance

**Building Diagnostics** 



# Hammer Series Intelligent Thermal Camera

## **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

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.

#### **High Reliability**

2-meter drop test, IP54 waterproof and dustproof

#### **Efficient Transmission**

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

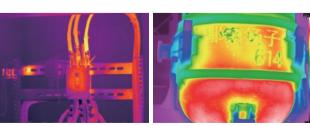
#### OTA Upgrade

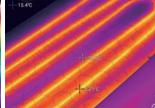
OTA upgrade to keep the device in top shape

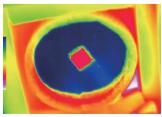
## PRODUCT PARAMETERS

Product model	H2	Н3	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 / Au	ıtomatic / Continuou:	s autofocus			
Measurement and analys	sis						
Measurement range	Support auto- switching: -40°C to 150°C, 0°C to 650°C	switching: -40°C to Support auto-switching: -40°C to 150°C, 0°C to 650°C, Optional 500°C to 2000°C					
Measurement accuracy		±2°C (	or ±2%, whichever is g	reater			
Image display							
Display screen		4.3', 800	0×480 pixel touchscre	een LCD			
Digital camera	51	ИР	8M	1P	13MP		
Functions							
Recording function	Photo and video (inf	rared & visible light)	Photo (image stite	hing) and video (infra	ared & visible light)		
Others		Customized physica	button, Intelligent di	agnosis, OTA update			
Storage and transmissio	n						
Storage media	Loc	cal storage (64 GB) ar	nd external SD card (6	64 GB and up to 256 (	GB)		
WIFI	Yes, it can be	connected to the mol	oile terminal for image	e and real-time video	transmission		
Power system							
Battery type		Lithiu	n-ion rechargeable b	attery			
Battery working time	≥5 hours ≥4 hours						
Physical parameters							
Hardware	Laser (Indication, F	Ranging 0.1m to 40m	), Illuminator, Microph	none, Speaker, Electro	onic Compass, GPS		
Weight	≤1.15KG (with battery)						

## **APPLICATION AREAS**





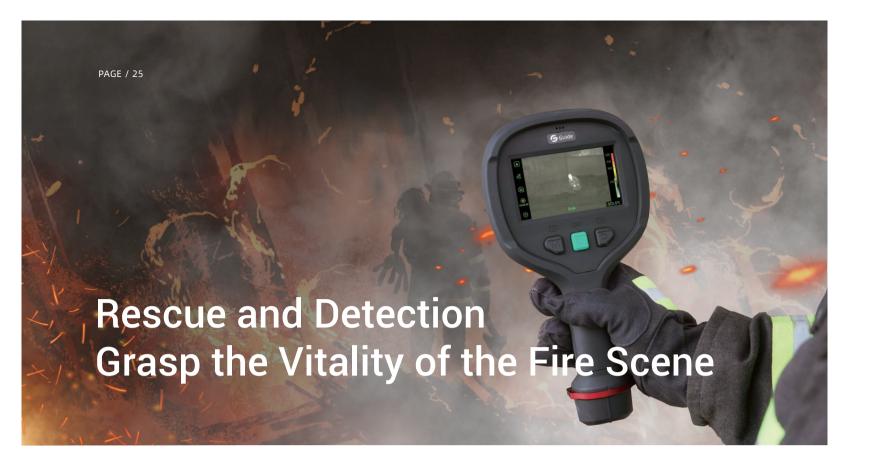


Power Detection

Iron and steel metallurgy

**HVAC Inspection** 

**Electronic Information** 



# PR Series Thermal Imaging Camera for Firefighting

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.

## **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

#### 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	≤45	mK				
Frame rate	30Hz	/9Hz				
Focal length	9m	nm				
Field of view	50°>	37°				
Focusing mode	Focus	s-free				
Digital zoom	2x/4	x/8x				
Measurement and ana	lysis					
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%, whi	chever 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, 80	0×480 Pixel				
Image mode	Basic fire fighting, Black and white, Fire scene, S	Search and rescue, Thermal detection, Standard				
Functions						
Recording function	Photo ar	nd Video				
Others	OTA u	pdate				
Storage and transmiss	ion					
Storage media	Local stora	ge (128 GB)				
External interface	Type-C, Micro HDMI, UNC	¼"-20 (Tripod mounting)				
WIFI	Yes, it can be connected to the mobile termina	al for image and real-time video transmission				
Power system						
Battery type	Lithium-ion rech	argeable battery				
Operating time	≥4 h	ours				
Environmental parame	ters					
Working temperature	General Working temperature range: -10° ranges: 80°C: 30 minutes, 120°C					
IP rating	IP	57				
Drop	2m dro	pp test				
Certification	CE, FCC, ROHS, UL, U	JN38.3, MSDS, NFFE				
Physical parameters						
Weight	≤1.3kg (wi	th battery)				

#### **APPLICATION AREAS**









Fire Reconnaissance

Fire Extinguishing

Search And Rescue

Fire Inspection

Wuhan Guide Sensmart Tech Co., Ltd



# **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

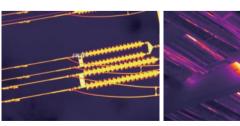
#### **Super-resolution Reconstruction**

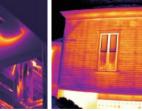
Increase the image detail information of low-resolution images for a high-quality imaging effect

#### **PRODUCT PARAMETERS**

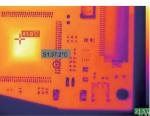
Product model	PS400 PS600 PS610			PS800				
Imaging and optics								
Detector type		VOx, 7.5 to 14μm						
Infrared resolution	384 × 288@17μm	640 × 48	0@17μm	1024 × 768@12µm				
Infrared frame rate		30 Hz / 9 Hz		25 Hz / 9 Hz				
Focal length	15 mm	25	mm	28 mm				
Field of view		25°	× 19°					
Focusing mode		Automatic	: / Electric					
Digital zoom	1.1x to 10x		1.1x to 35x					
Measurement and anal	ysis							
Measurement range	Support auto-	switching: -40°C to 150°C, (High temperatur	100°C to 800°C, Optional 70 e lens is required)	00°C to 2000°C				
Measurement accuracy	±2°C or ±2%, which	nichever is greater						
Image display								
Display screen	5" LCD							
Eyepiece		1, 280 × 960 L	COS screen					
Digital camera	8 MP		13 MP					
Functions								
Recording function	Photo and video (infrared & visible light)	Photo (image sti	tching) and video (infrar	red & visible light)				
Storage and transmissi	on							
Storage media	Local	storage (64 GB) and SD	card (64 GB and up to 1	28 GB)				
WIFI	Yes, it can b	pe connected to the mob video tran	oile terminal for image a nsmission	nd real-time				
Cellular network	4G module (optional)							
Physical parameters								
Hardware	Laser (Indication, Rang	ging), Illuminator, Microp	ohone, Speaker, Electron	ic 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				
	1			1				

## **APPLICATION AREAS**







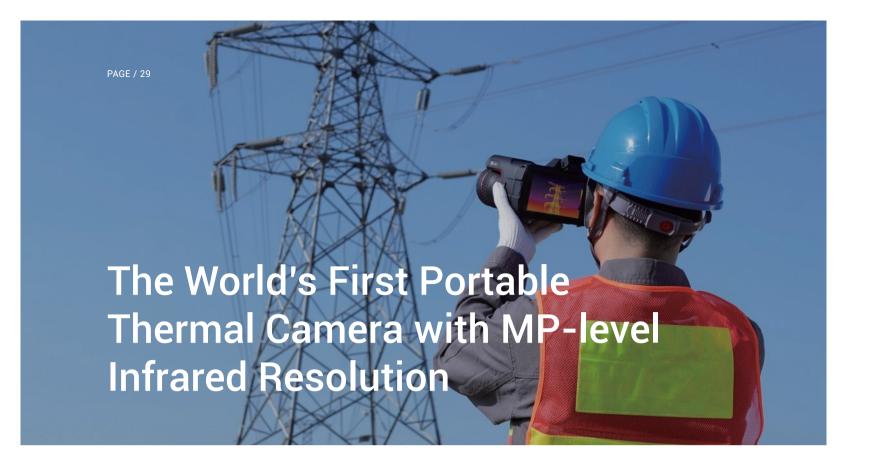


Power Detection

Petrochemicals

**Building Diagnostics** 

Scientific Research



# 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 autofocusing 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

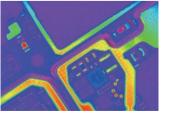
#### **PRODUCT PARAMETERS**

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	Manu	al / Automatic / Continuous autofoo	cus				
Measurement and analy	sis						
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)	150°C, 0°C to 650°C, Optional Support auto-switching: -40°C to 150°C, 0°C to 800°C, Optio 00°C to 2500°C (High tempera-					
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 ligh	it, up to 16 MP				
Functions							
Recording function	Photo (image	e stitching) and video (infrared & vis	ible light)				
Others	Customized physical but	tton, Intelligent diagnosis, NFC conr	nection, OTA update				
Storage and transmission	n						
Storage media	Local storage (64 G	B) and external SD card (128 GB ar	nd 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

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# **Handheld Thermal Cameras Selection Guide**



Series		T Series	PC S	eries	P Series	PF Series		PS S	eries	
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	251	mm	28mm
Focus	F	ocus-free	Focus-free	Automatic	Focus-free	Focus-free		Electric/	Automatic	
Visible Camera	N/A	70000 pixels	21	MР	300000 pixels	5MP	8MP		13MP	
Display	2.4'	LCD screen	2.4" LCI	) screen	3.5" LCD to	uch screen	5",1280×	720 High I	ight Touc	h Screen
Image Model	IR	IR,Visible,PIP	IR, Visible	e,PIP, MIF	IR, Visible	e,PIP, MIF		IR, Visible	e,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		0°C~150°C, 0°C~400°C		~150°C, ~550°C	-20°C~150°C, 100°C~400°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	С	enter spot	Cente	er 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	TI	card 32G	TF ca	rd 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	НЗ	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 autofous					Focus-free Manual / Auto / Continuous autofous				
5MP	5MP	8MP	8MP	13MP	N/A	N/A	8MP/13MP 8MP/16MP		
4.3" highlight LCD touch screen					4.3" LCI	) 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, -40°C~150°C, 0°C~650°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 details

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# **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.

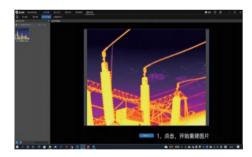
#### Modular function interface

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



#### **Super-resolution reconstruction**

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



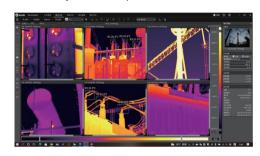
#### Temperature trend analysis

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

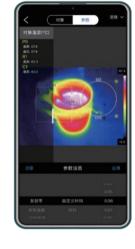


# Mobile APP iOS & Android

# Thermography

Portable thermal camera exclusive mobile APP





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

Wuhan Guide Sensmart Tech Co., Ltd Wuhan Guide Sensmart Tech Co., Ltd.

# **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**

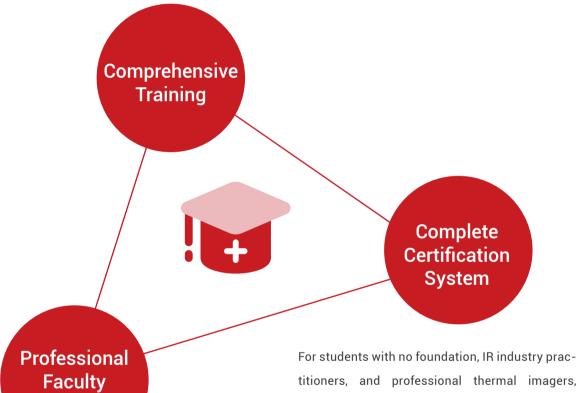
Quality assurance: One-year warranty for the whole machine and 6 months warranty for accessories from the date of sale, lifetime maintenance

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.



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.

Background

titioners, and professional thermal imagers, different training courses are introduced to help them participate. Challenges are also set for the certification.