



UTi384J/UTi640J

Professional Thermal Camera



Electric Utility



Electronic R&D



Equipments Inspection

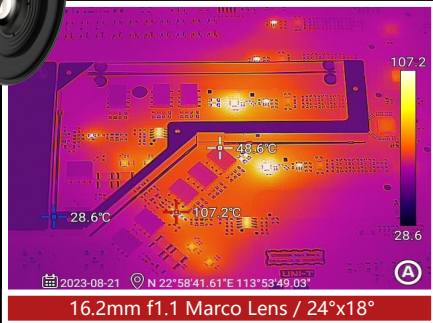
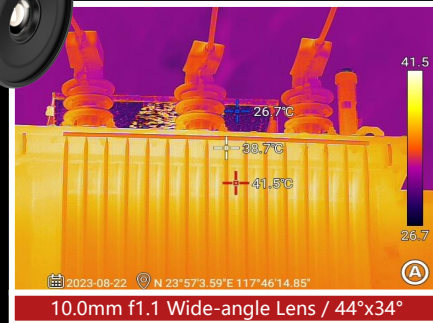
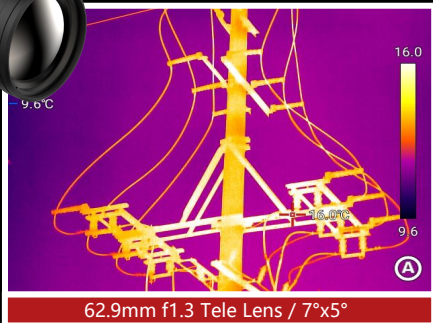
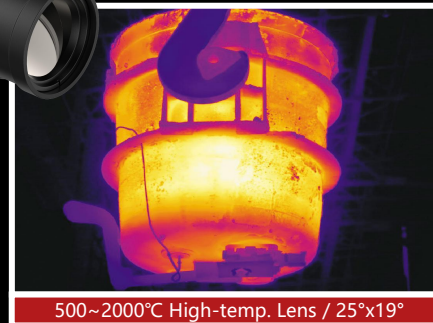
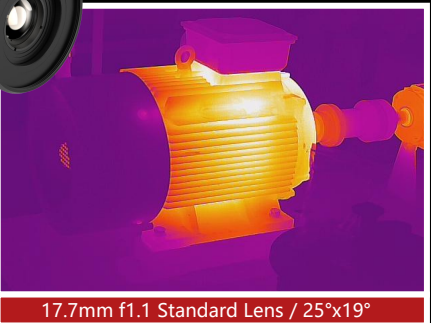


Building diagnosis



Petrochemical industry

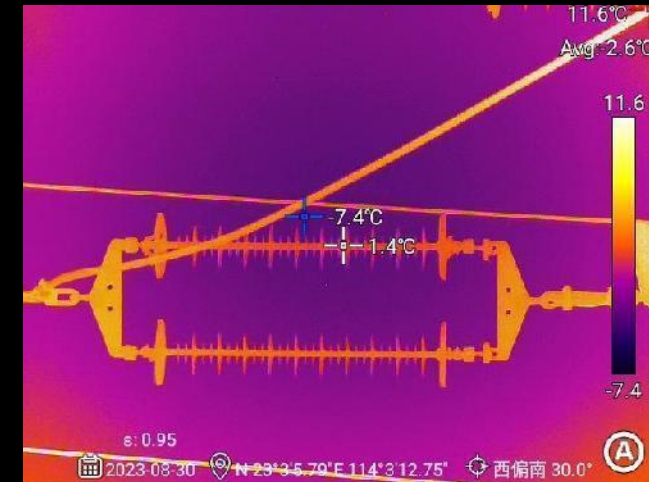
Interchangeable Lenses

**UT-Z006****UT-Z007****UT-Z008****UT-Z009****UT-Z010****UT-Z011**

*Note: UT-Z011 is the standard lens, others are optional

Focus Modes

Focusing the targets in different measurement distances at a breakneck speed, saving operating time and improving the working efficiency by obtaining sharper images with accurate temp. data.



Continuous AF



Semi-auto Focus



Laser Assisted Focus



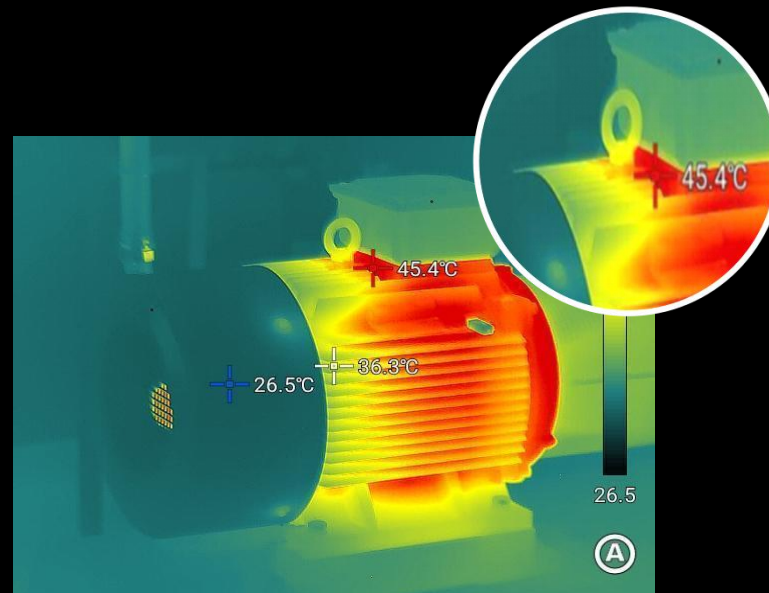
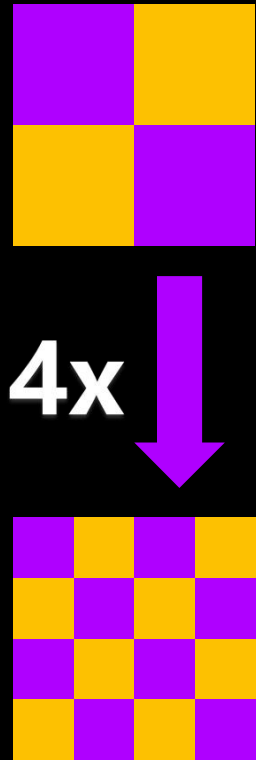
Manual Focus



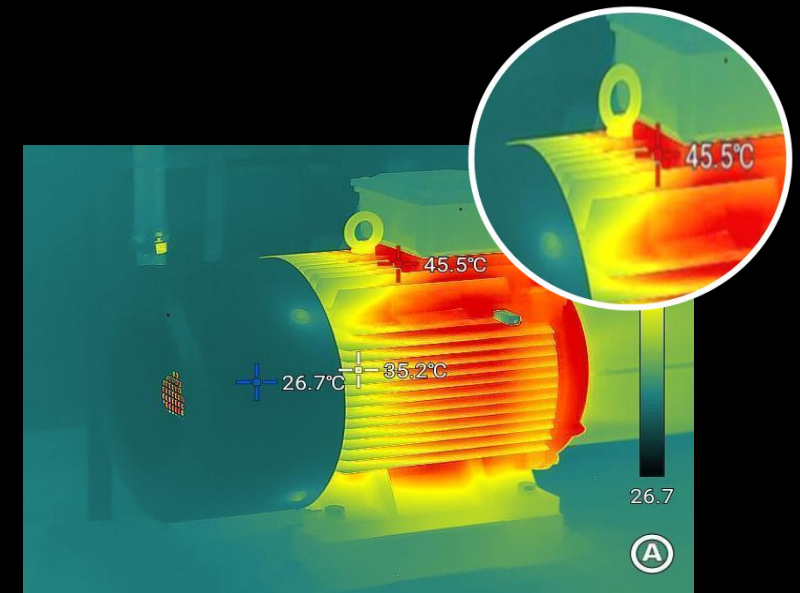
Touch AF

Super-resolution

Enhance image details via the algorithm, the image quality can be 4x improved after Super-resolution is enabled.



Original Resolution (640×480)



Super-resolution (1280×960)

Extraordinary Performance

IR Resolution

640×480

Super-resolution is supported, 4x improved

Temp. Range

-40~650°C

Up to 2000°C (Optional Hi-temp. lens)

Frame Rate

30Hz

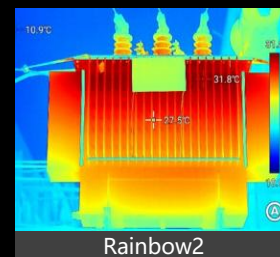
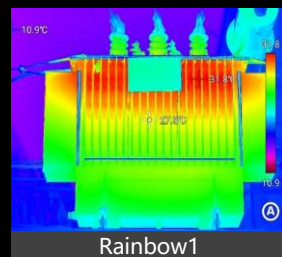
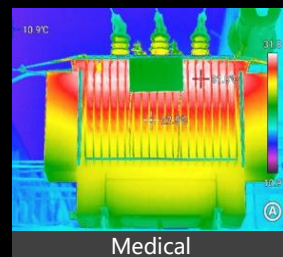
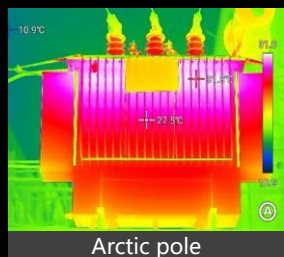
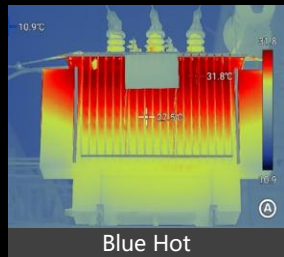
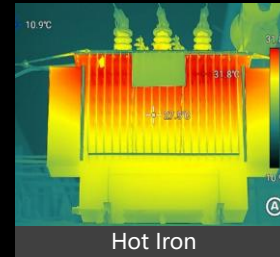
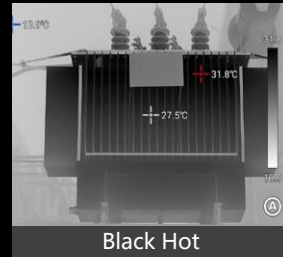
NETD

40mK

- Interchangeable lenses apply for more application scenarios.
- The focus system is fearless of measurement distance. Make measurement work meticulous & accurate.
- The touch display screen makes manual work easier.
- Customized auxiliary key & all-around voice assistant make the complex and tedious work easier & interesting.

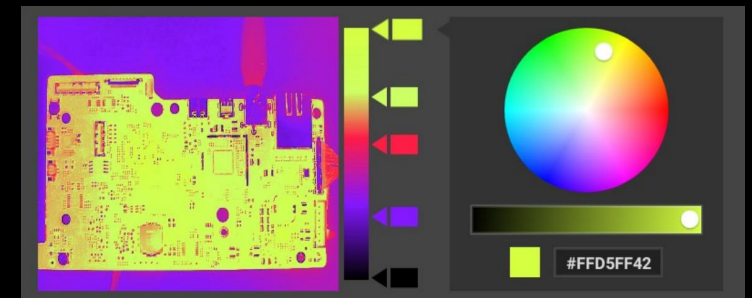


Rich Color Palettes



Custom Palette

Add custom color codes to display temperature distribution from low to high.



Digital Zoom



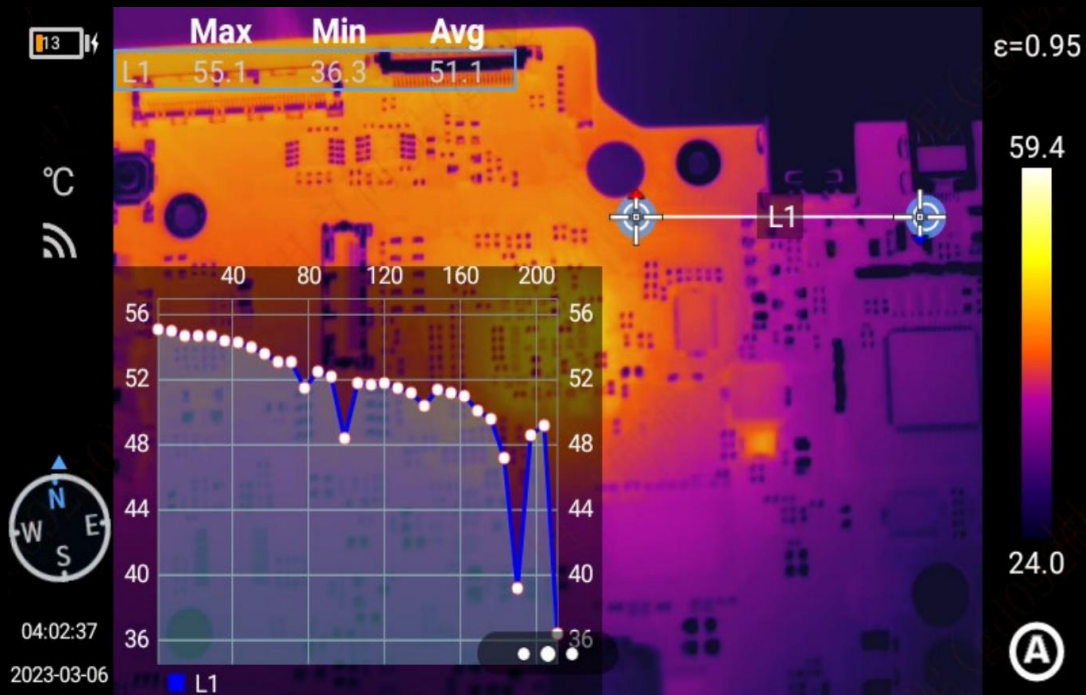
1.0x



20.0x

On Screen Analyzer

Add custom analysis tools (e.g. point, line, rectangle, and circle) to focus on specific temperature areas.

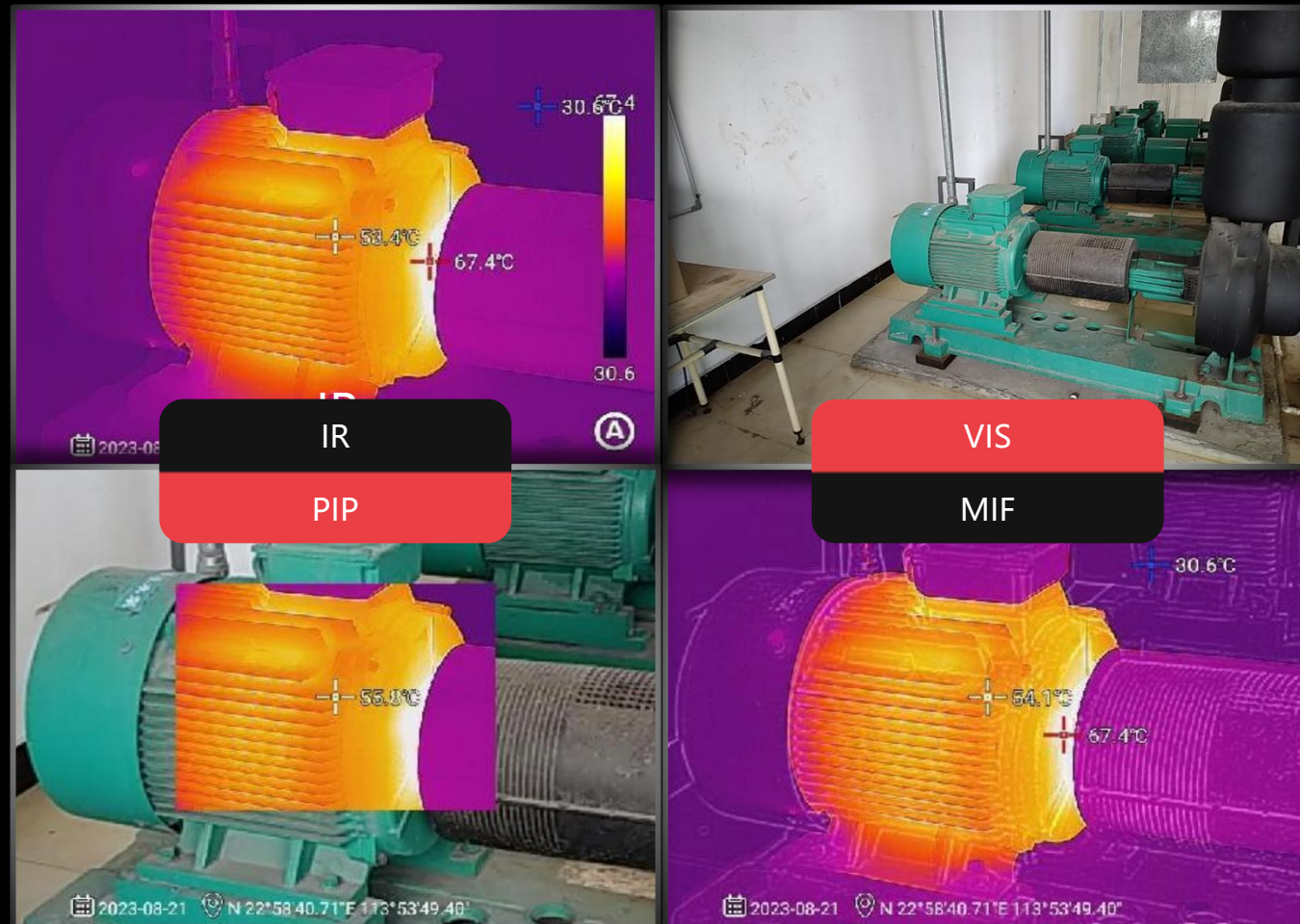


Real-time Image Analysis



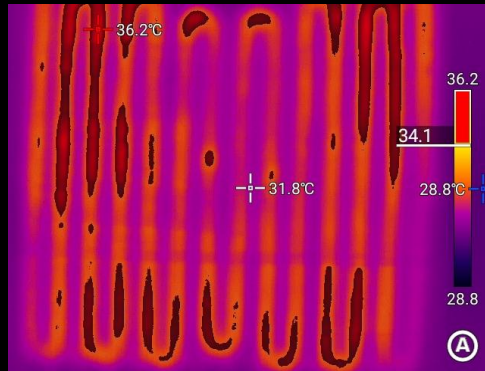
Temperature Difference Analysis

Image Modes

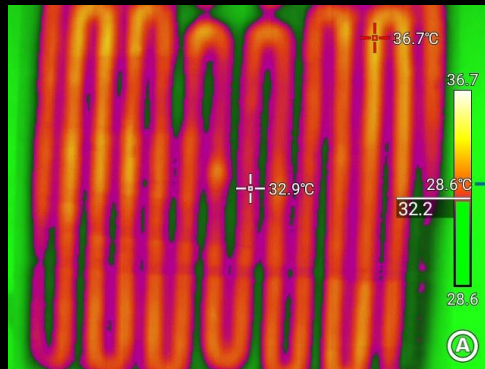


Isotherm

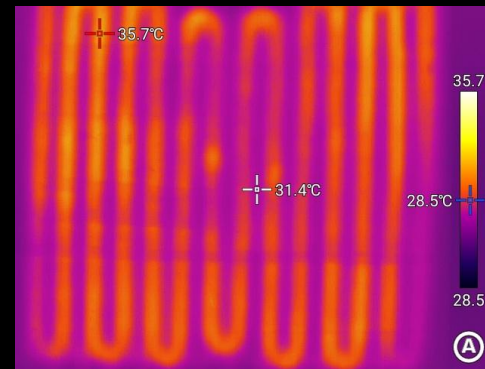
Using Isotherm function wisely can quickly focus on the areas whose temperature you are interested on.



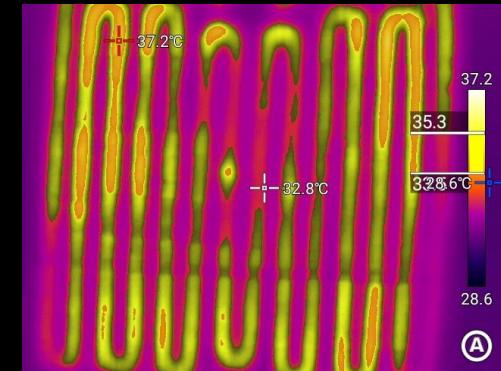
Upward



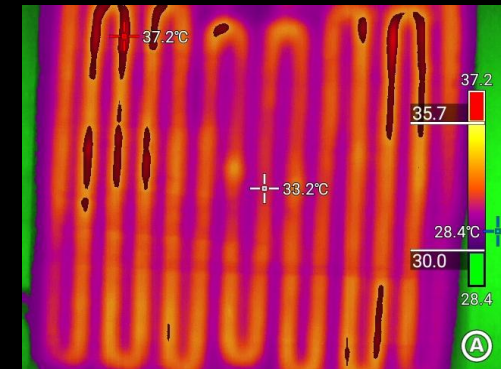
Download



Auto



Inside the section



Outside the section

Level & Span

Optimizing images display effect by adjusting Level & Span function, improving the parsing ability of images with radiometric data so that users can easily recognize the hidden faults.



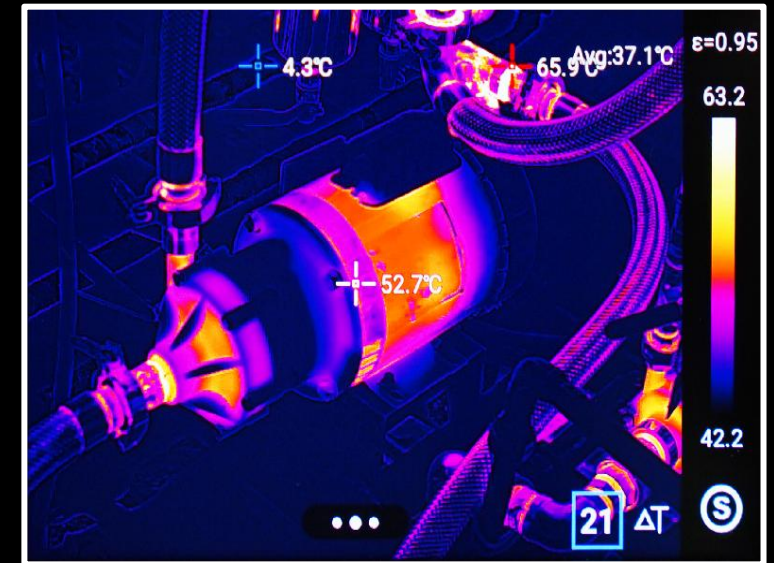
A

Auto



S

Semi-auto

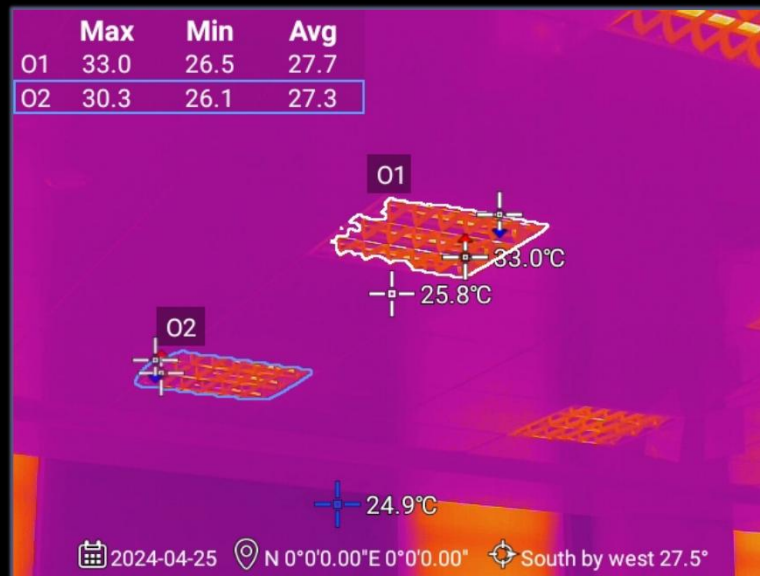


M

Manual

Image Outline

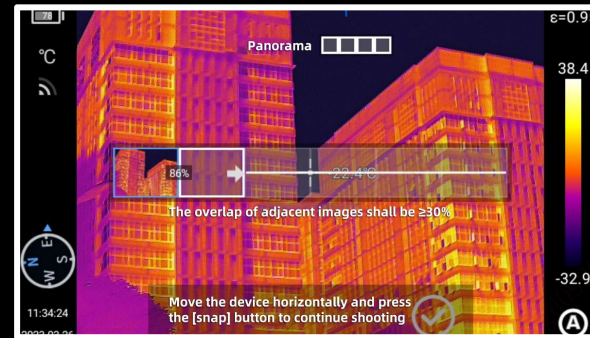
Manually draw the outline for interested areas, and the intelligent system will automatically align it to analyze the temperature (Mix, Min, and Avg)



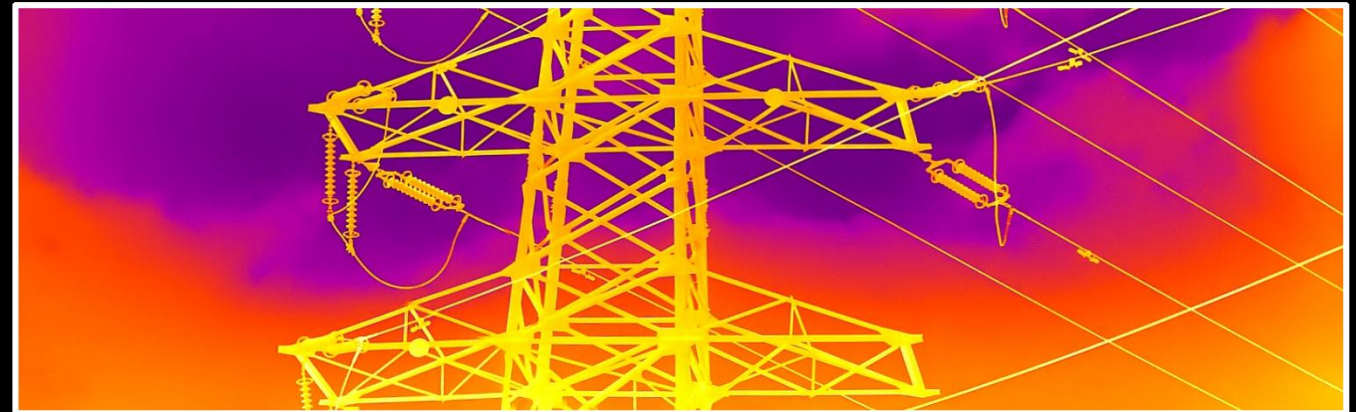
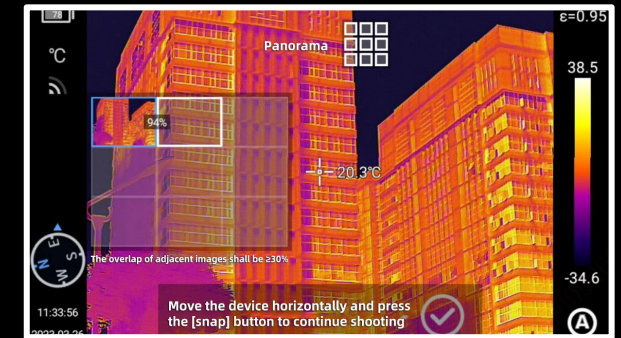
Panoramic Stitching

On the basis of retaining the image quality and detail infos, multiple IR images are combined into panoramic image, assisting users to globally observe the temperature differences and changes of the targets.

Horizontal shooting

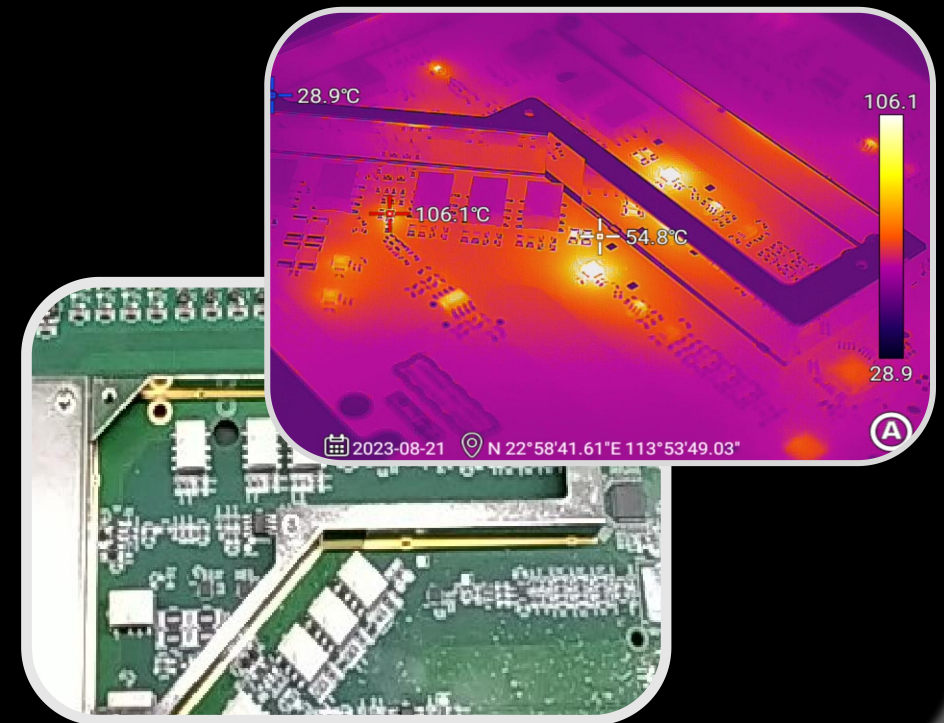


Gridview shooting



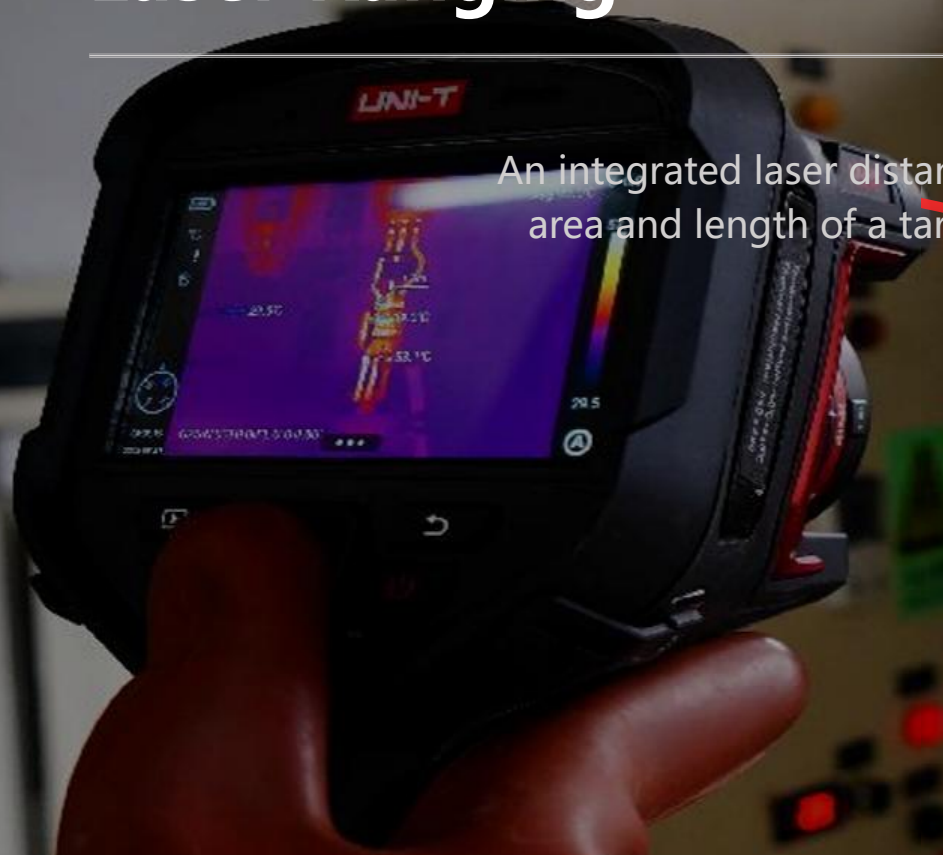
Dual-light Video Recording

- Supports recording visual & infrared videos simultaneously.
- Videos recorded in MP4 & Irgd (with radiometric data) format.
- Hi-res digital camera for clearer image quality.



Laser Ranging

An integrated laser distance meter is a tool that can accurately measure the area and length of a target, which can be analyzed for various purposes.



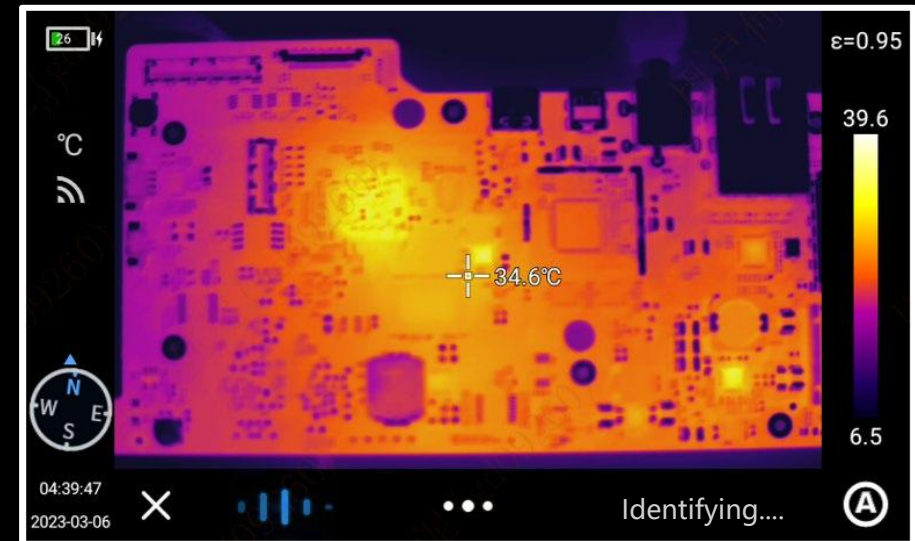
Intelligent Assistant

Auxiliary button



Set shortcut command for "Auxiliary button" [C] in system settings to call up the corresponding functions

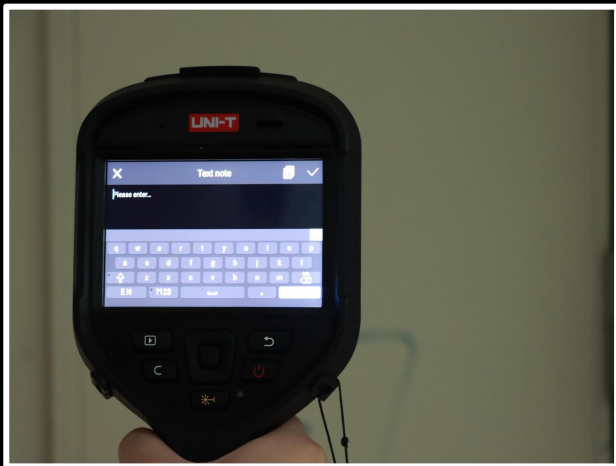
All-around voice assistant



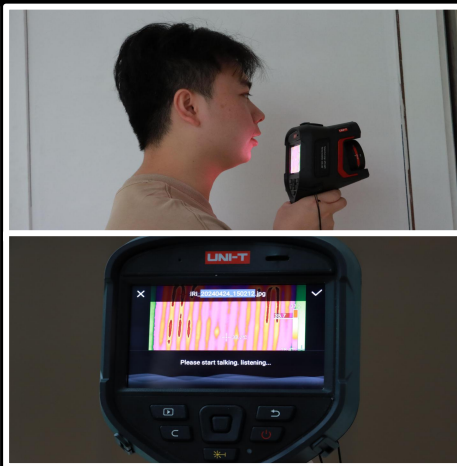
Quickly perform operations by identifying AI voice commands

Image Annotations

Text, voice and QR code scan annotations are supported, GPS and compass functions automatically add location infos to the image, helping users manage data conveniently, improving working efficiency.



 Text Annotation



 Voice Annotation



 QR code scan



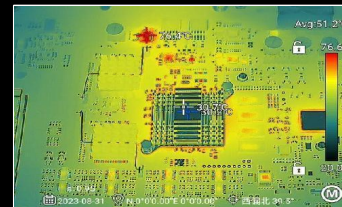
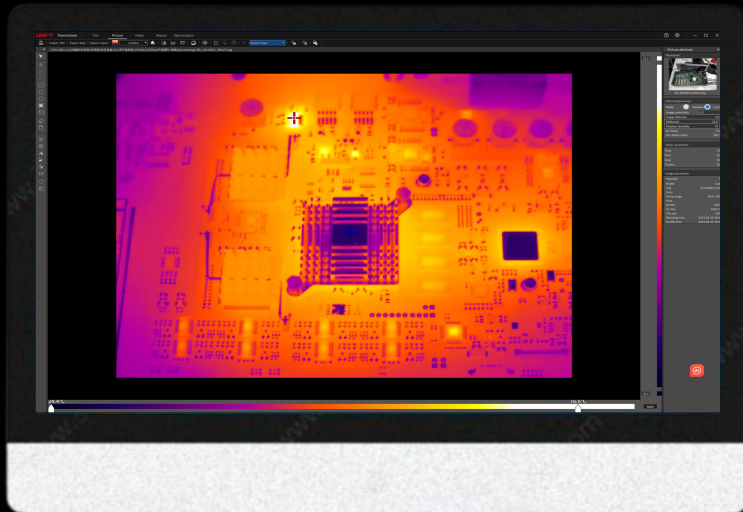
 GPS

 Compass

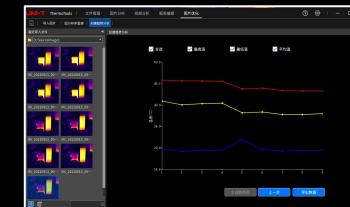
Diversified Workflow

UNI-T Analyzer

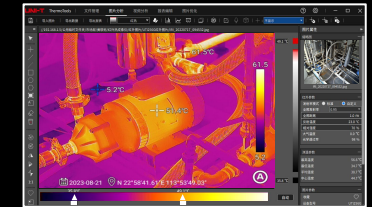
UNI-T Analyzer is a professional software for PC analysis. It has a user-friendly interface and allows users to perform in-depth analysis and batch processing of collected data. The analysis report provided by the software is convincing and helps users to draw up a targeted solution.



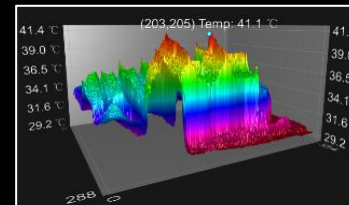
Super resolution reconstruction



Trend analysis



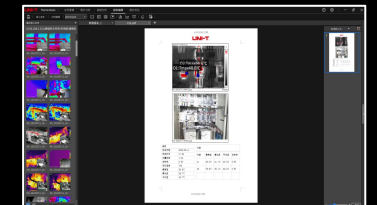
Real-time video transmission



Visualize 3D stereo image



Customized fusion mode



Report generation

Diversified Workflow

UN-T Analyzer

Connect NDT APP via Wi-Fi to realize data analysis & sharing, secondary editing, report generation, reverse operation, and Wi-Fi live streaming anywhere & anytime.



Battery Operating Time

2 detachable Li-ion battery packs with 3350mAh and a dual bay charging base are included to provide you with up to 8 hours of continuous operations.



Charging Modes

Charging the device via Type-C interface



Charging the battery packs via Charging base





Specifications

Model	UTi384J	UTi640J
Technical Parameters		
Display	4.3" LCD Touch (800x480)	
IR resolution(Pixels)	384×288	640×480
Super IR	768×576	1280×960
Pixel size	12μm	
Frame rate	30Hz / 9Hz	
Thermal sensitivity(NETD)	≤40mK	
Focus	Manual / Automatic / Touch autofocus / Continuous autofocus	
Lens focal length	10.5mm (Standard Lens)	17.7mm (Standard Lens)
Field of view(FOV)	25°(H) × 19°(V) (Standard Lens)	
Temperature measurement range	Support auto-switching: -40°C~150°C, 0°C ~650°C 500°C ~2000°C (Optional Hi-temp. Lens)	
Accuracy	±2°C or ±2% whichever is greater	
General Characteristics		
Battery	3350mAh detachable Li-ion battery pack×2	
Operating time	≥5 hours (with Wi-Fi off)	≥4 hours (with Wi-Fi off)
USB	Type-C	
Storage	64GB Internal & 64GB Micro SD card	
Storage format	Image: JPG / Video: MP4 & Irgd	
Protection	IP54 & 2m drop proof	
Certifications	CE, FCC, RoHS	
Languages	ZH_hans, ZH_hant, EN, FR, DE, ES, IT, RU, PL, KR, PT, TR, TH, NO, CZ, HU, JP, AR	
Weight	≤1.15KG (included standard lens & battery)	
Dimension	292mm×125mm×125mm	

Model	UTi384J	UTi640J
Functions		
Color palettes	White Hot, Iron Red, Arctic, Rainbow 2, Hot Iron, Rainbow 1, Fulgurite, Medical, Tint, Black Hot, Blue Hot, Sepia, Green Hot, Ice and Fire, Amber, Customized	
Image modes	IR, VIS, MIF, PIP	
On screen analyzer	10 Points/10 Lines/10 Rectangles/10 Circles	16 Points/16 Lines/16 Rectangles/16 Circles
Isotherm	Auto, Upward, Downward, Inside the section, outside the section	
Hi/Lo temperature alarm	LCD animation, LED flashlight, Buzzer	
Hi/Lo temperature tracking	√	
Digital camera resolution	8MP	13MP
Digital zoom	1.1x~10x	1.1x~20x
Video/Voice recording	√	
Bluetooth / GPS	√	
Wi-Fi / Wi-Fi live streaming	√	
E-compass	√	
LED light / Laser pointer	√	
Laser distance measurement	√	
Analysis software	PC+APP	
Others	Customized physical button, Voice all-round assistant	

Standard Accessories

Model No.	Dimension	Net. Weight	Standard Qty Per Catron	Standard Catron Size	Standard Carton G.W.	FOB (VAT Excl.)	MSRP (VAT Excl.)
UTi384J	292mm×125mm×125mm	≤1.15KG (Battery Incl.)	1	500mm×260mm×420mm	/	\$3,599	\$6,999
UTi640J	292mm×125mm×125mm	≤1.15KG (Battery Incl.)	1	500mm×260mm×420mm	/	\$5,999	\$9,999

- Li-ion battery pack----- 2 pcs
- Charging Base----- 1 pcs
- Lens front and back cover----- 1 pcs
- Power adapter (US/CN)----- 1 pcs
- Adapter plug (EU/UK/AU)----- 1 pcs
- Wrist strap----- 1 pcs
- Shoulder strap----- 1 pcs
- Type-C to C charger cable----- 1 pcs
- Type-C USB cable----- 1 pcs
- Ethernet cable----- 1 pcs
- Type-C to RJ45----- 1 pcs
- SD card (64GB)----- 1 pcs
- Quick start guide----- 1 pcs
- Accessories list card----- 1 pcs



Application

Power Tower Inspection

Due to various factors such as insulator aging, poor contact, line corrosion and others, there may be potential safety hazards during the operation of power towers. If there are any heating abnormalities, it can negatively affect the safety of the power supply. However, with the use of an infrared thermal camera, these faults and potential safety hazards can be quickly and accurately detected without interrupting the power connection. This ensures safe and stable operation during the inspection process, making the infrared thermal camera a very practical detection tool.



Application

Insulator Temperature Screening

The insulator is subjected to electromagnetic field, mechanical stress, cold & heat changes, humidity, and other effects for a long time, which leads to moisture inside the insulator and the core rod at the end, and surface stains resulting in abnormal heating, which directly affects the safe operation of the power grid. With the help of thermal cameras complete the non-contact diagnosis, saving the troubleshooting time.



Application

Distribution Cabinet Inspection

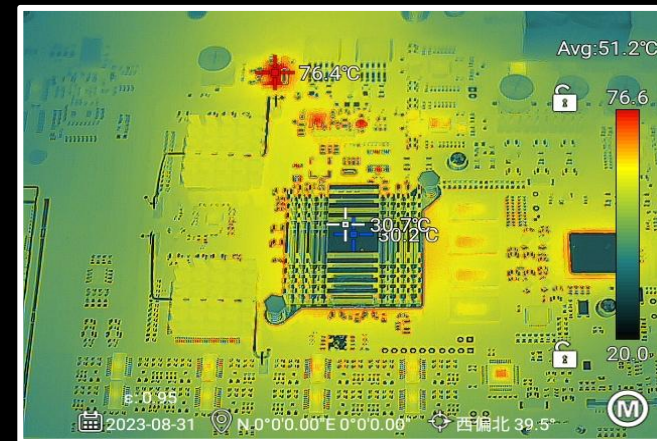
There are a large number of switches and contacts available in the distribution cabinet. Due to poor contact and aging corrosion resulting in circuit loading. Inspection personnel can use thermal cameras to realize visual and accurate temperature measurements. Combined with laser pointer and image fusion mode to locate the abnormal heating spot quickly, improving the working efficiency.



Application

PCB R&D

During the process of integrating the electronic components into the PCB board, developers need to determine whether the “thermal design” is reasonable and whether there the heating abnormalities in the components. Benefiting from the characteristics of thermal cameras, developers can monitor the temperature trend to know the working status of the components in real-time. Moreover, thermal cameras can also combined with the macro lens and PC analysis software, providing the developers with convictive data, and helping them to know the performance and status of the circuit board better.



Application

Smelter Furnace

By continuously monitoring the temperature changes in high-temperature areas and the surface of furnace equipment, abnormal phenomena can be promptly detected, thereby avoiding failures caused by erosion, wear, blockage, or leakage. This helps prevent the occurrence of safety accidents while also contributing to the goal of energy conservation and emission reduction.

