Main Specifications

	Model	M600
Thermal Imaging Performance	Detector Type	Uncooled VOx Infrared Focal Plane Detector
	Resolution of Detector	640×512
	Spectrum Range	8~14μm
	Pixel Size	12μm
	NETD	35mk
	IFOV	1.31mrad
	Frame Rate	30Hz
	Focal Length	9.1mm
	FOV	48°×38°
	Focusing Mode	Manual focusing
	Measurement Range	-20℃～+550℃
	Accuracy	±2℃ or ±2% of the reading (The greater shall prevail)
	Measurement Resolution	0.1℃
Overall Device	Temperature Measurement Mode	Central spot measurement/Hot spot and cold spot tracing, and temperature display
	Custom Point, Line and Area Temperature Measurement	Movable point/line/area temperature measurement; displaying hot spot tracing for line/area temperature measurement; displaying the highest temperature value for line temperature measurement, and displaying the highest, lowest and average values for area temperature measurement;
	Measurement Unit	Centigrade, Fahrenheit, Kelvin
	Image Mode	Detail enhancement, IR, visible light, PIP, fusion
	Palette	10
	Temperature Alarm	Full frame high/low temperature alarm
	Temperature Range of Color Code	Manual/automatic temperature range
	Laser Pointer	Yes
	Visible Light Camera	5 million pixels
	Digital Zoom	Max. 8×
	Photo/Video Storage Function	IR .jpg picture + visible light .jpg picture with temperature data; video without data;
	Annotation Function	Voice annotation via microphone
	Display Size	3.5-inch touch screen (480×640)
	Figure Naming	Automatic naming, naming by scanning QR code, manually type in the name
	Memory Card	Standard 32GB Micro SD card
	Cloud Function	Transfer shooting data to cloud drive, share data and perform secondary analysis at multiple clients; support automatic time synchronization;
	Battery Type	Rechargeable and dismountable Li-ion battery
	Power Supply	USB TypeC
	Connection Type	USB, SD card, WiFi (AP mode or networking mode)
	Charging Time	About 3h
	Operating Time	About 3h
	Power Management	Automatic shutdown: 5 min, 10 min, 20 min, non-automatic shutdown
Physical Property	Analysis Software	PC&APP
	Installation Way	Tripod support
	Operating Temperature	-10°C~+50°C
	Staging Temperature	-20°C~+60°C
	Relative Humidity	10% - 95%, non-condensing
	Drop Protection	2m
	Ingress Protection Grade	IP54(IEC 60529)
	Impact and Vibration	Impact 25g (IEC 60068-2-27); vibration 2.5g (IEC60068-2-6)
	Dimension (H×W×D)	256.4 ×105.1 ×105.3(mm)
	Weight	About 670g
	Authentication	CE/FCC/RoHS2.0
	Accessory	5V 2A power adapter, USB cable, SD card, documentation, desktop charger

IRay Technology Co., Ltd.

Authorized IRay Distributor:

·The manual is for illustrative purposes only. The pictures and technical specifications are subject to change without notice.

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Tianxuan M600

Handheld Thermal Imager

Check clearly, Solve quickly

IRay Tianxuan M600 Series Handheld Infrared Thermal Imager is a high-resolution manual focusing thermal imaging thermodetector. It is provided with a built-in IRay self-developed 12μm high-performance 640×512 infrared thermal imaging core chip and a 5-million-pixel visible light camera of 35 mK thermal sensitivity and 30 Hz high frame rate. With its accurate manual focusing function, it can save focusing time and provide accurate data and clear images to meet the requirements of research and analysis work. With its excellent characteristics, Tianxuan M600 Infrared Thermal Imager is the right-hand assistant of engineers in scientific research, professional equipment, and building inspection.

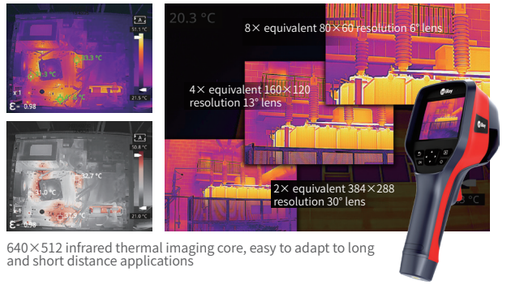
01

High-performance temperature measurement core

Tianxuan M600 performs well in key tasks, with one machine serving several purposes

Real 320,000 real-time infrared temperature measurement points + 5 million pixels and visible light

The 12μm high-performance 640×512 infrared thermal imaging core, together with an accurate manual focusing lens, can observe the fine structure of circuit board accurately from a close distance, or inspect power lines and building facades far away. With 8x digital zoom and ultra-high infrared resolution, it can perfectly replace the combination of one camera and multiple lenses with low resolution, because it doesn't need to change the lens.



640×512 infrared thermal imaging core, easy to adapt to long and short distance applications

High resolution, high frame rate, high accuracy, wide range, all in Tianxuan M600

Tianxuan M600 can distinguish a temperature difference of 0.035°C, and together with the 30 Hz high frame rate, can obtain delicate and smooth images and videos in scientific research works, with no detail missing. Its measurement accuracy reaches ±2°C, and meanwhile, it provides a wider measurement range to ensure the accuracy of temperature data.

Start analysis once the USB is plugged, support full-frame real-time transmission and analysis of temperature information

It supports cloud services and timed photographing. The software on PC terminal supports real-time and offline analysis. The photos and videos taken can be uploaded to the cloud and can be downloaded, opened, and analyzed at multiple clients. The report can be output by pressing one key, which further supports the applications in scientific research and equipment monitoring and temperature measurement assessment.

Start analysis once the USB is plugged

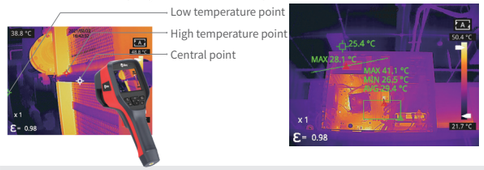
02

Advanced interaction function

Tianxuan M600 can provide visible temperature result clearly

Three-point temperature display, custom point/line/area temperature measurement

Tianxuan M600 can automatically trace the highest and lowest temperature points and the temperature of the central point; it can perform movable point/line/area temperature measurement; hot spot tracing can be displayed for line/area temperature measurement; the highest temperature value can be displayed for line temperature measurement, and the highest, lowest and average values can be displayed for area temperature measurement;

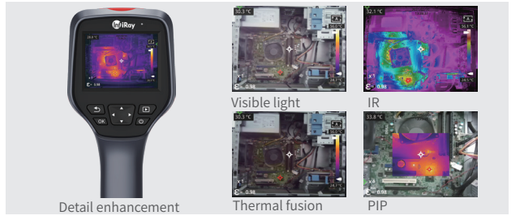


Complete analysis data on PC, easy to operate the APP

It can upload the thermal image and visible light image with temperature data to the analysis software on PC terminal for professional analysis and get analysis results. It supports WiFi transmission and can be connected to App for analysis and sharing temperature images and data, which is efficient and fast;

Built-in 5 image modes+10 pseudo color settings

Tianxuan M600 has 5 image modes including detail enhancement, IR, visible light, PIP, and fusion, with 10 pseudo color settings, to meet the temperature measurements of different requirements and increase the efficiency of temperature measurement;



Support full-frame high/low temperature alarm and timed photographing

When the temperature in the inspection area exceeds the threshold value, a temperature alarm is sent in order to discover the fault point in advance to "nip in the bud" so as to effectively reduce the loss caused by high-temperature accident. It especially supports timed photographing to record temperature rise changes so as to help equipment operation analysis and various scientific research applications.

03

Easy-to-use and reliable overall performance

Tianxuan M600 is your efficient and right-hand thermal imaging assistant

Solid and durable, IP54 + 2m-drop protection

It features a 2m-drop protection and is waterproof/dustproof. Its IP grade reaches IP54, so that its temperature measurement accuracy, imaging quality, and application functions will not be influenced even if the tools drop off, are trampled, or get stained with water or dirt.

2m-drop protection Waterproof Dustproof

HD thermal image displayed on a 3.5-inch HD touch screen

After the 640×512 HD infrared thermal image is obtained, you can view more temperature information details of each image on the 3.5-inch HD touch screen.

Laser pointer module, quick observation target positioning

Tianxuan M600 has a built-in laser pointer to help you quickly locate the observation target and obtain an accurate temperature measurement value.

Voice annotation and QR code naming functions free your hands

It can help you quickly distinguish the necessary information for imaging during a long time period of temperature measurement work and recognize the real-time site situation at that time accurately. The images can be named automatically, or by scanning QR code, or by entering a name manually.

Application Fields

Product R&D Building inspection Equipment maintenance Electric tour inspection Electrical maintenance