InfiRay

Tianxuan M200F

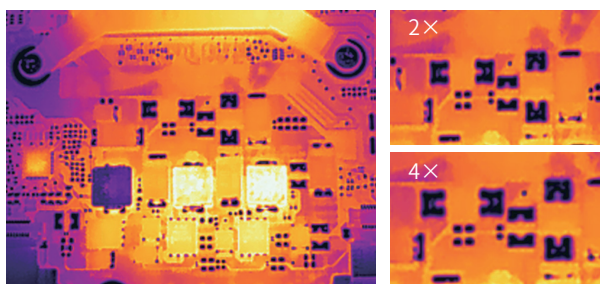# Handheld Thermal Camera

Check Clearly, Solve Quickly

InfiRay M200F is another masterpiece of Tianxuan series with 256×192 resolution. With five major advantages and combined with InfiRay AI-Temp accurate temperature measurement algorithm, and Matrix III high-definition image algorithm, we strive to provide professional thermal cameras with high-definition images, large-screen display and accurate temperature measurement for electrical maintenance and circuit design.

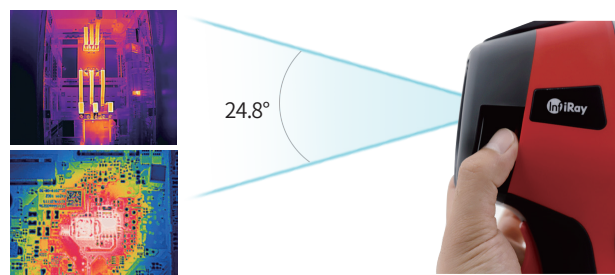## 01 Professional Thermal Camera with Clear Images

■ Powerful detector, powerful imaging

256×192 self-developed VOX infrared detector chip brings clean and clear infrared images; with the 4× digital zoom function, temperature details are not missed and work efficiency is improved.
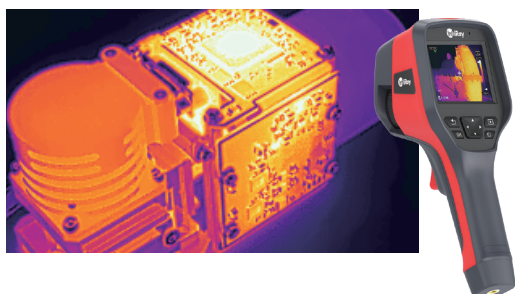

■ One device from near to far

With its small FOV of 24.8° and combined with manual focusing function, it can perform near electrical inspection, and check far component distribution. One device is suitable for two scenarios.
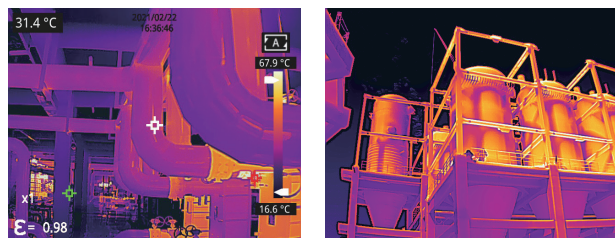

■ High sensitivity, wider measurement range

M200F can distinguish a minimum temperature difference of 0.04°C, which helps to capture small hot spots difference. Whether for a high-density PCBA or a complex power distribution cabinet, it can identify and discover hidden dangers more quickly.

It has a wide temperature measurement range of -20°C~+550°C, involving from low temperature applications such as cold chain to high temperature applications such as power and chemical industry, which provides support for monitoring more temperature targets.

■ Think and inspect as you wish

Upgraded from the capacity algorithm, the M200F has an astonishing battery life of 8h, which can help you calmly handle the high-intensity measurement work, especially the large-scale field or external field measurement work such as power and petrochemical industries.

02 Large Screen in Tianxuan Series

■ The M200F is equipped with a 3.5-inch touch screen, which supports center point, hot spot and cold spot tracing and temperature display. The large touch screen can be used for point, line and area temperature measurement and on-site analysis of ROI, and it can alarm by areas to improve efficiency.

■ For manual adjustment of temperature width, the 3.5-inch touch screen is convenient for zooming and moving the PIP area, adjusting pictures in dual-spectrum fusion mode, and adjusting pictures in detail enhancement mode, which meets the needs of multiple scenarios and multiple purposes.

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■ 5-megapixel visible light lens 4 modes + 10 palettes, dual-spectrum imaging, suitable for more detection environments.

03 Solid and Durable Professional Thermal Camera Tool

■ Solid workmanship, IP54 waterproof and dustproof, and 2m drop protection; convenient and quick camera button, with short press to take pictures and long press to record, built-in 32G SD card to meet storage needs.

■ Provided with two quick removal batteries, supporting portable 5V mobile power charging; the whole machine is guaranteed for 2 years by the original factory, so that engineers have no worries.
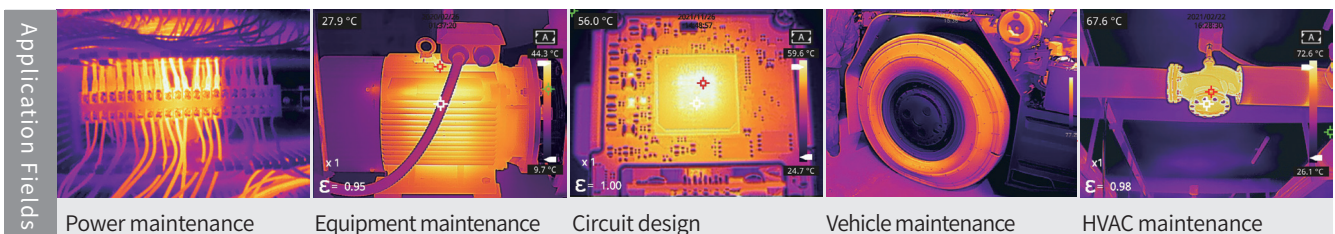
| 2m drop protection | Waterproof & dustproof | 2 years original factory warranty |

Application Fields

| Power maintenance | Equipment maintenance | Circuit design | Vehicle maintenance | HVAC maintenance |

Specifications

Model	M200F
Detector Type	Uncooled VOx infrared detector
Detector Resolution	256×192
Spectral Band	8~14μm
Pixel Pitch	12μm
NETD	<40mK
IFOV	1.71mrad
Frame Rate	25Hz
Focal Length	7mm
FOV	24.8°×18.7°
Focusing Mode	Manual focusing
Measurement Range	-20~+150°C, 100~550°C
Measurement Accuracy	±2°C or ±2%
Measurement Resolution	0.1°C
Measurement Mode	Central spot measurement/hot and cold spots tracing and temperature display
Point/Line/Area Measurement	10 points/10 lines/10 areas/ highest/lowest/central temperature point tracking
Measurement Unit	°C, °F, Kelvin
Emissivity Setting	0.01~1.00; Step Length:0.01
Environment Temperature Setting	-10°C~+50°C; Step Length:1°C
Distance Setting	0.5~12m; Step Length:0.5m
Image Mode	Infrared/visible light/PIP/dual-spectrum fusion
Color Palette	10 (Whitehot, Blackhot, Iron, Lava, Rainbow, Rainbow HC, Blackred, Purple-orange, Special, Special 2)
Alarm Mode/Temperature Alarm	Image alarm/temperature alarm
Temperature Scale	Manual/automatic temperature range
Visible Light Camera/Laser Pointer	5 megapixels/laser pointer
Video/Photo Storage	Infrared image with temperature data/visible image/H.264 video without temperature data.
Display	3.5-inch touch screen (480×640)
Image Naming	Auto/Manual input, QR code scanning
Memory Card	Standard 32GB Micro SD card
Battery Type	Rechargeable and dismountable lithium-ion battery
Power Supply Port	USB Type - C
Data Transmission	USB；WiFi
Charging Time	About 3h
Battery Life	About 8h
Power Management	Automatic shutdown: 5 min, 10 min, 20 min, non-automatic shutdown
Analysis Software	PC software, IOS/Android APP
Tripod Mounting	1/4"-20-UNC
Operating Temperature	-10~+50°C
Storage Temperature	-20~+60°C
Relative Humidity	10%~95%, non-condensing
Encapsulation/Drop	IP54/2m
Shock and Vibration	Shock 25g (IEC 60068-2-27); vibration 2.5g (IEC60068-2-6)
Dimensions (H×W×D)	258.4 × 105.1 × 102.3 (mm)
Weight	660.5g
Packing	5V 2A power adapter(Multi-country universal power plug), USB cable, SD card, Battery ×2, Quick start manual, Charging base, Calibration certificate, Packing list, Portable bag

Authorized IRay Distributor:

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