

Main Specifications

Model	C100	C200
Detector Type	VOx uncooled infrared FPA detector	
Resolution	160×120	256×192
Spectral Band	8~14 μm	
Pixel Pitch	12 μm	
NETD	<50mK	
Frame Rate	25Hz	
FOV	35.3°×26.7°	56°×42.2°
IFOV	3.8mrad	3.8mrad
Focusing Mode	Focus-free	
Measuring Range	-20 °C~ +550 °C	
Temperature Measurement Accuracy	±2°C or ±2% of the reading (the larger one shall prevail)	
Temperature Measurement Resolution	0.1°C	
Measurement Tools	Central Spot measurement/Hotspot and cold spot tracing	
Image Modes	Thermal imaging, fusion, PIP, visible imaging	
Palette	7	
Temperature Alarm	Full frame high/low temperature alarm	
Alarm Mode	Support image and LED alarm	
Photo Function	Support, with temperature data	
Secondary Analysis	Provide PC analysis software for secondary analysis of data	
Screen Size	2.8LCD (320×240)	
Lighting	LED fill-in light	
Storage	Standard 16GB SD card, supporting expansion	
Tripod support	Yes, at the bottom of the handle	
Operating Time	11h, @25°C indoor	
Charging Time	About 4h, @25°C indoor	
Operating Temperature	-10°C~+50°C	
Storage Temperature	-20°C~+60°C	
Operating Humidity	Relative humidity 10%~95%, non-condensing	
Drop Protection	2m	
IP encapsulation	IP54	
Dimension	237×75×92mm	

Company Profile

IRay Technology Co., Ltd. concentrates on developing and manufacturing thermal imaging technologies and products, with completely independent intellectual property rights. IRay committed to providing global customers with professional thermal imaging products and solutions. The main products include IRFPA detectors, thermal imaging cores, and terminal products.

With R&D personnel accounts for 47% of all employees, IRay owns 567 patented technologies in multiple fields, such as the development of IC, the design and manufacture of MEMS sensor, and Matrix III image algorithms.

IRay products have been applied in various fields, such as disease control and prevention, industrial temperature measurement, intelligent surveillance, outdoor observation, automatic driving, AI and machine vision.



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Website: [www.iraytek.com](http://www.iraytek.com)/[www.infiray.com](http://www.infiray.com)  
·This manual is illustrative only. Technical specifications are subject to change without prior notice. Sample No.: DY2020Y001-C Printing time: Sept 2020

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Tianshu C200  
Handheld Thermal Camera

See difference





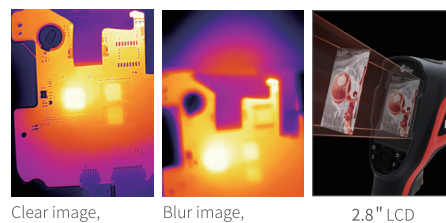
Tianshu C200 Handheld Thermal Camera adopts the infrared detector with nearly 50000 pixels. It has wide temperature range (-20 °C~+550 °C), infrared+visible light fusion, 7 pseudo colors+4 image modes, 11h working time, IP54 protection grade, and 2m drop-proof. All these advantages can fully meet the various application needs of electrical diagnostics, machinery/equipment maintenance, building inspection, property and household, and other occasions. It is easy to use, professional, and efficient.



# 1 Professional Temperature Measurement, Upgraded Functions At Same

## ✓ 256×192 Resolution

Clearer details help you get rid of fuzzy images. Longer available distance ensures operation safety. More details and smaller targets can be observed at the same distance.



Clear image, obvious details      Blur image, lost details      2.8" LCD

## ✓ 11h Ultra-long Battery Life

With the Type-C charging interface, it can be fully charged in 4h. With 11h battery life, it is ready to use without worry about power supply.



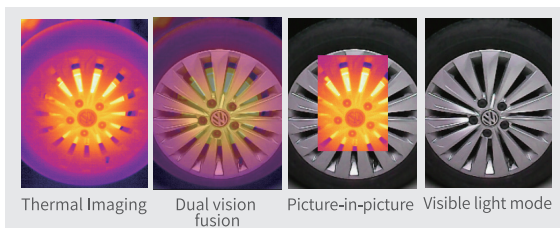
the Type-C charging interface

## ✓ Dual Vision

It has infrared+visible light imaging function. Dual light fusion can better adapt to different observation target scenes.

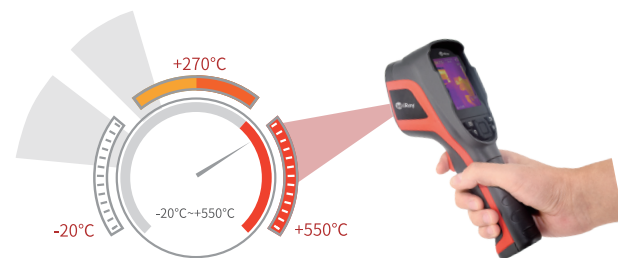
## ✓ Thermal Imaging/dual vision fusion/ picture-in-picture/visible light mode

7 pseudo colors can easily locate hot spot and enhance detection efficiency.



## ✓ -20°C~+550°C Wider Range, Meet More Measurement Needs

From HVAC to automotive maintenance, one good temperature measuring tool is enough.

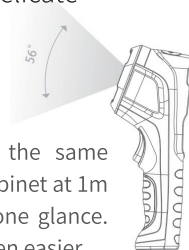


# 2 Powerful Performance, Fast Inspection

## ✓ Built-in high-performance 12μm VOx detector core, providing more delicate images.

## ✓ 56° FOV

Focus-free design brings large FOV at the same distance. It can cover the entire electric cabinet at 1m distance and scan 10m<sup>2</sup> indoor floor at one glance. Inspection in a narrow space has never been easier.

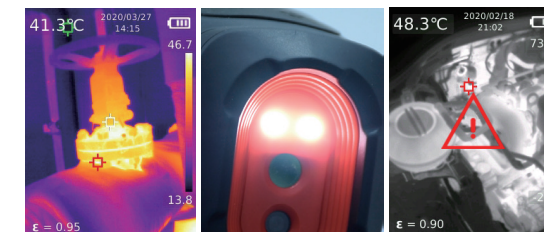


## ✓ Auto Tracking Of Highest/lowest-temperature Points

The center/highest/lowest temperature point could be displayed in real-time. Image and LED alarm are supported. The alarm threshold could be set for easy troubleshooting.

## ✓ NETD<50mK

Tiny abnormal temperature point is clear. It is also suitable for the inspection of building quality, material defect, and precision devices.



The center/highest/lowest temperature point      LED alarm      Image alarm

# 3 Friendly Interaction, Simple Design With Rich Functions

## ✓ 5 Buttons Easy Operation, Pick and Scan

Measure temperature with ultra-easy button navigation, no additional training needed. Just unpack and power up.



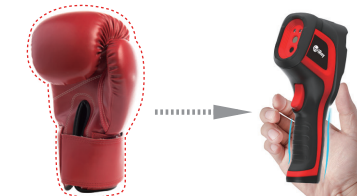
## ✓ Durable And Free To Work

IP54 protection supports 2m drop-proof. It can be handheld or installed on a tripod. Everything is to make you free to work.



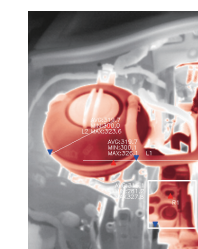
## ✓ Inspired By Boxing Gloves, Gravity Center Moves Down, Comfortable To Grip

Its camera trigger has perfect radius with the non-slip texture for better touch. Made of two-color injection molding environmental protection material, the first impression after picking it up is comfortable.



## ✓ Support PC offline temperature analysis.

The backstage supports professional temperature analysis and image optimization, and the analysis report can be formed with one click.



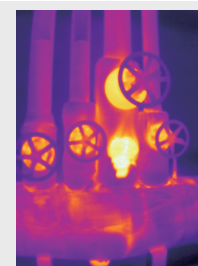
PC offline temperature analysis



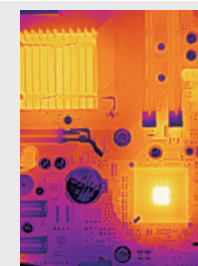
LED light  
Used for dark environments  
Infrared lens  
visible light lens



## Application Fields



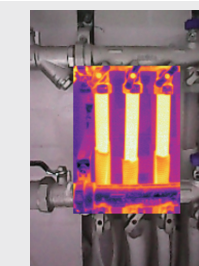
Pipeline Inspection



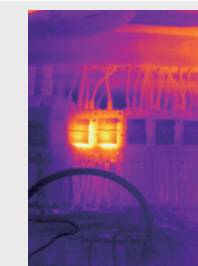
Product Development



Automotive Maintenance



HVAC Maintenance



Electrical Diagnosis