

C Series

Handheld Thermal Camera

Technical Data V1.0.3



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1. Overview

1.1 Update Comments

Our manuals are updated several times per year. Please visit our website to access the latest manuals.

1.2 Authorized Release Notes

The authoritative version of this publication is Chinese. In case of divergences due to translation errors, the Chinese text has precedence. Any latest changes are first implemented in Chinese.



2. Technical Data

General Description

With built-in nearly 50,000 pixels (256*192) infrared detector, C series handheld temperature measurement thermal camera is featured with wide temperature measurement range (-20 $^{\circ}C$ ~+550 $^{\circ}C$), focusing-free design, dual-light imaging, long standby time, IP54 encapsulation level, and resistance to drop of 2 meters, which greatly meets the needs of various electrical diagnosis, mechanical equipment maintenance, building inspection, property home use, etc. and is easy to use, professional and efficient.

Advantages

- 1. Thermal sensitivity < 0.05 °C, temperature measuring range is -20 °C ~+550 °C. It is suitable for many applications.
- 2.11 hours standby and no worry for power.
- 3. Fusion of visible light and infrared, and seven palettes.
- 4. FOV 56° and focus-free design.
- 5. Support the offline temperature measurement and analysis function of PC, and one-click generation of analysis report, which can meet the professional temperature analysis.
- 6. IP54 encapsulation makes it withstand two meters fall, durable, and safe to work.



2.1 C200SE

Thermal Module	
Resolution of Detector	256*192
Pixel Pitch	12µm
NETD	<40mK
Focal Length	3.2mm
FOV	56°*42°
IFOV	3.8mrad
Focus Mode	Focus-free

Temperature Measuring	
Temperature Measuring Functions	Central point/highest/lowest
Temperature Measuring Range	-20 ℃~350 ℃
Temperature Measuring Accuracy	±2% or ±2℃
Temperature Measuring Unit	Celsius, Fahrenheit, Kelvin
Emissivity Setting	Adjustable between 0.01 and 1.0

System Functions	
Illumination	LED filling light
Image Mode	Thermal
Palette	White hot, Black hot, Iron, Rainbow
Temperature Alarm	The highest and lowest temperature alarm in the full frame
Alarm Method	Image alarm and LED alarm
Auto Image Capture during Alarm	Not available
Time-lapsed Image Capture	Not available
Saving Images	Auto, manual
Image Data	Image and temperature data
USB Video Transmission	Not available
PC Analysis Software	Available
Display Dimension	2.8 inch LCD (320*240)
Storage Card	16GB Micro SD card
Battery Type	Rechargeable Lithium battery
Power Interface	USB Type-C



C Series Handheld Thermal Camera Technical Data

System Functions	
Charging Time	About 4hours (shutdown state)
Operation Time	9 hours
Power Management	automatic shutdown : 5 minutes, 10 minutes, 20 minutes, off

Others	
Support for Tripod	With a connecting socket at the bottom of the
	handle
Operation Temperature Range	-10℃~+50°C
Storage Temperature Range	-20℃~+60°C
Relative Humidity	10% \sim 95%,non-condensing
Encapsulation/Fall	IP54/2m
Dimensions(L*W*H)	237*75*92mm
Weight	520g
Accessories	USB cable,16GB SD card, user documentation



2.2 C200

Thermal Module	
Resolution of Detector	256*192
Pixel Pitch	12µm
NETD	<40mK
Focal Length	3.2mm
FOV	56°*42°
IFOV	3.8mrad
Focus Mode	Focus-free

Temperature Measuring	
Temperature Measuring Functions	Central point/highest/lowest
Temperature Measuring Range	-20 ℃~550 ℃
Temperature Measuring Accuracy	±2% or ±2℃
Temperature Measuring Unit	Celsius, Fahrenheit, Kelvin
Emissivity Setting	Adjustable between 0.01 and 1.0

System Functions	
Illumination	LED filling light
Image Mode	Thermal, thermal fusion, visible light, PIP
Palette	White hot, Black hot, Iron, Lava, Rainbow,
	Rainbow HC, Black red.
Temperature Alarm	The highest and lowest temperature alarm in the
	full frame
Alarm Method	Image alarm and LED alarm
Automatically take pictures	Not available
when alarm	
Timed Photograph	Not available
Saving Images	Auto, manual
Image Data	Image and temperature data
USB Video Transmission	Not available
PC Analysis Software	Available
Display Dimension	2.8 inch LCD (320*240)
Storage Card	16GB Micro SD card
Battery Type	Rechargeable Lithium battery

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C Series Handheld Thermal Camera Technical Data

System Functions	
Power Interface	USB Type-C
Charging Time	About 4hours (shutdown state)
Operation Time	11hours
Power Management	automatic shutdown: 5 minutes, 10 minutes, 20
	minutes, off

Others	
Support for Tripod	With a connecting socket at the bottom of the handle
Operation Temperature Range	-10℃~+50°C
Storage Temperature Range	-20°C∼+60°C
Relative Humidity	10% \sim 95%,non-condensing
Encapsulation/Fall	IP54/2m
Dimensions(L*W*H)	237*75*92mm
Weight	520g
Accessories	USB cable,16GB SD card, user documentation



2.3 C200 Pro

Thermal Module	
Resolution of Detector	256*192
Pixel Pitch	12µm
NETD	<40mK
Focal Length	3.2mm
FOV	56°*42°
IFOV	3.8mrad
Focus Mode	Focus-free

Temperature Measuring		
Temperature Measuring Functions	Central spot/highest/lowest/3 customized spots	
Temperature Measuring Range	-20 ℃~ 550 ℃	
Temperature Measuring Accuracy	±2% or ±2℃	
Temperature Measuring Unit	Celsius, Fahrenheit, Kelvin	
Emissivity Setting	Adjustable between 0.01 and 1.0	

System Functions	
Illumination	LED filling light
Image Mode	Thermal, thermal fusion, visible light, PIP
Palette	White hot, Black hot, Iron, Lava, Rainbow, Rainbow HC, Black red.
Temperature Alarm	The highest and lowest temperature alarm in the full frame
Alarm Method	Image alarm and LED alarm
Automatic alarm snapshot	yes, the number of shots and time interval can be set.
Timed Photograph	Available; the number of shots and time interval can be set.
Saving Images	Auto, manual
Image Data	Image and temperature data
USB Video Transmission	Available. Real-time temperature analysis can be performed.
PC Analysis Software	Available

C Series Handheld Thermal Camera Technical Data



System Functions	
Display Dimension	2.8 inch LCD (320*240)
Memory Card	16GB Micro SD card
Battery Type	Rechargeable Lithium battery
Power Interface	USB Type-C
Charging Time	About 4 hours (shutdown state)
Operation Time	15 hours
Battery Management	automatic shutdown: 5 minutes, 10 minutes, 20
	minutes, off

Others		
Support for Tripod	With a connecting socket at the bottom of the handle	
Operation Temperature Range	-10℃~+50°C	
Storage Temperature Range	-20℃~+60°C	
Relative Humidity	10% ~ 95%, non-condensing	
Encapsulation/Fall	IP54/2m	
Dimensions(L*W*H)	237*75*92mm	
Weight	520g	
Accessories	USB cable,16GB SD card, user documentation	



3. Structural Drawings

