IRC-110 Infrared Camera

Point-and-shoot thermal imaging technology for the professional

The Amprobe IRC-110 thermal camera, designed for the professional, is rugged with point-and-shoot functionality to give you a visual heat map image for quick and accurate identification of temperature related issues. Troubleshoot electrical connections, motors, HVAC and electrical, and insulation leaks around buildings to identify potential energy savings.



Features

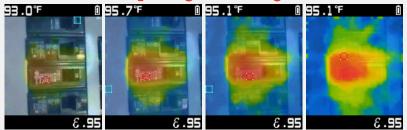
- Infrared heat map image blending at 0%, 25%, 50%, 75%, and 100%
- Three selectable color palettes (grey scale, hot iron and rainbow)
- Center-point temperature measurement and focus free
- IR measurement 20:1 Distance to Spot ratio
- Adjustable emissivity from 0.10 to 1.00
- Auto off function
- Selectable °F and °C
- Intuitive joystick navigation to on-screen menu and settings
- Hot and cold markers instantly identifies hottest and coldest spots

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Safety Certification All Amprobe tools, including the Amprobe IRC-110, are rigorously tested for safety, accuracy, reliability, and ruggedness in our state-of-the-art test lab. In addition, Amprobe products that measure electricity are listed by a 3rd party safety lab, either UL or CSA. This system assures that Amprobe products meet or exceed safety regulations and will perform in a tough, professional environment for many years to come.

AMPROBE°

Infrared heat map image blending



Blending Mode 25% Blending Mode 50% Blending Mode 75% Blending Mode 100%

Applications

- Electrical, HVAC, mechanical, and automotive
- Identify temperature related issues for electrical connections and motors
- Quickly verify HVAC functionality and performance
- Locate heat loss spots on the insulation around buildings to save energy costs

Industries

- Industrial Maintenance
- Commercial Facility Maintenance
- Oil & Gas Maintenance
- Reliability Inspections
 - Building Diagnostics
 Electrical, Water & Gas Utilities
 - Research & Development

Specifications

FeaturesBuilt-in digital cameraInfrared heat map overlayColor palettesField of viewFocus systemIR temperature rangeDistance to Spot ratio (D:S)EmissivityDisplay resolutionHot and cold markersCenter point marker	• Five blending modes: 0%, 25%, 50%, 75%, 100% Grey Scale, Hot Iron, Rainbow 33 ° x 33 ° Focus free 14 °F to 932 °F (-10 °C to 500 °C) 20:1 0.10 to 1.00 0.2 °F/0.1 °C •
Infrared heat map overlayColor palettesField of viewFocus systemIR temperature rangeDistance to Spot ratio (D:S)EmissivityDisplay resolutionHot and cold markers	Grey Scale, Hot Iron, Rainbow 33 ° x 33 ° Focus free 14 °F to 932 °F (-10 °C to 500 °C) 20:1 0.10 to 1.00 0.2 °F/0.1 °C
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IR temperature range Distance to Spot ratio (D:S) Emissivity Display resolution Hot and cold markers	20:1 0.10 to 1.00 0.2 °F/0.1 °C
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Emissivity Display resolution Hot and cold markers	0.2 °F/0.1 °C
Hot and cold markers	
Hot and cold markers	•
	•
	•
Temperature units	Selectable °F/°C
Auto power off	•
Detailed Specifications	
-	
Temperature measurement	Yes, center point
Temperature range	14 °F to 932 °F (-10 °C to 500 °C)
IR accuracy (calibration geometry with ambient temperature $23^{\circ}C \pm 2^{\circ}C$)	≥ 32 °F (≥ 0 °C): ± 4 °F (± 2 °C) or ± 2 % of the reading, whichever is greater < 32 °F (< 0 °C): ± 6 °F (± 3 °C)
Display resolution	0.2 °F/0.1 °C
IR Repeatability	\pm 8 % of the reading or \pm 2 °F (\pm 1 °C), whichever is greater
Temperature Coefficient	$0.1 \circ C/^{\circ}$ or $\pm 0.1 \%/^{\circ}$ of the reading, which ever is greater
Distance to spot	20:1
Minimum spot size	0.32 inches (8 mm)
Response time (95 %)	< 125 ms
Spectral response	8 μm to 14 μm
Emissivity	Digitally adjustable from 0.10 to 1.00 by 0.01
Visual image with infrared heat map overlay	Five blending modes (0%, 25%, 50%, 75% and 100%)
Visual to IR effective image alignment	\geq 10 inches
Visual image resolution	16,384 pixels (128 x 128 pixels)
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Screen resolution	20,480 pixels (128 x 160)
Field of view	33 ° x 33 °
Thermal sensitivity	150 mK
Focus system	Focus free
Image palettes	Grey Scale (white hot), Hot Iron and Rainbow
Hot and cold marker	Yes
Display	1.77 in color TFT with 128 x 160 pixels
Operating temperature and humidity	32 °F to 122 °F (0 °C to 50 °C) 10 % to 90 % RH non-condensing at 86 °F (30 °C)
Storage temperature	-4 °F to 140 °F (-20 °C to 60 °C) without battery
Operating and storage altitude	< 6561 ft (< 2000 m)
	4-feet (1.2 m)
Drop proof Vibration and shock	
	IEC 60068-2-6, 2.5g, 10 to 200 Hz, IEC 60068-2-27, 50g 11ms Three (3) 1.5 V AA IEC LR6 alkaline batteries
Power supply	8 hours with display ON (Typical) Power consumption: 150 mA (Typical)
Battery life Auto power off	Selectable modes: OFF, 1 minute, 2 minutes, 5 minutes and 10 minutes
Certifications	C E 🛽 🖉
Electromagnetic Compatibility	EN 61326-1 Korea (KCC): Class A Equipment (Industrial Broadcasting & Communication Equipment) [1] [1] This product meets requirements for industrial (Class A) electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and is not to be used in homes.
Size (H x W x L)	Approx. 7.3 x 2.1 x 4.1 in (185 x 54 x 104 mm)
Weight	Approx. 0.57 lb (0.26 kg)

Amprobe[®] | <u>info@amprobe.com</u> | Fluke Corporation, Everett, WA 98203 | Tel: 877-AMPROBE (267-7623)

Mouser Electronics

Authorized Distributor

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