




Amprobe IRC-110 Thermal Camera

- Infrared heat map image blending at 0%, 25%, 50%, 75%, and 100%, a Fluke patented technology that can be adjusted for easier interpretation between infrared and visual images.
- Three selectable color palettes (grey scale, hot iron and rainbow) that can be changed depending on the specific application of the measurement. This option allows for different viewings of an infrared image by changing the false-color presentation. Grayscale shows a more equal and linear presentation of colors to enhance detail, while Hot Iron and Rainbow combine high contrast with Grayscale.
- Center-point temperature measurement with a marker that indicates the center of the infrared thermometer measurement spot, making it easy to determine the surface temperature of the desired target.
- Focus free lens that automatically focuses based on depth of field, providing a sharp image without having to manually adjust the lens.
- 20:1 Distance to Spot ratio
Distance to spot ratio expresses the ability of an infrared thermometer to measure temperature of a surface from a distance. A 20:1 distance to spot ratio for the IRC-110 indicates that to provide an accurate reading, the target's diameter must be at least 1 foot in length when the camera is 20 feet away. Smaller targets require a closer proximity. For best accuracy, the target should be at least twice as large as the spot size. The smallest spot size that can be measured is 0.31 in (8 mm).
- Adjustable emissivity from 0.10 to 1.00 to provide the most accurate temperature readings. The emissivity of the surface of a material describes its effectiveness in emitting energy as thermal radiation. Different types of surfaces may require an adjustment in the emissivity level.
- Auto off function to save battery life.
- Selectable temperature units to switch between °F and °C.
- Intuitive joystick navigation to on-screen menu and settings.
- Hot and cold markers instantly identify the locations of the hottest and coldest spots within a target area.

Features	IRC-110
Built-in digital camera	Yes
Infrared heat map overlay	Five blending modes: 0%, 25%, 50%, 75%, 100%
Color palettes	Grey Scale, Hot Iron, Rainbow
Field of view	33 ° x 33 °
Focus system	Focus free
IR temperature range	14 °F to 932 °F (-10 °C to 500 °C)
Distance to Spot ratio (D:S)	20:1
Emissivity	0.10 to 1.00
Display resolution	0.2 °F/0.1 °C
Hot and cold markers	Yes
Center point marker	Yes
Temperature units	Selectable °F/°C
Auto power off	Yes

General 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°C ± 2°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	± 0.8 % of the reading or ± 2 °F (± 1 °C), whichever is greater
Temperature coefficient	0.1 °C/°C or ± 0.1 %/°C of the reading, whichever is greater
Distance to spot	20:1
Minimum spot size	0.31 in (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	≥ 10 inches
Visual Image resolution	16,384 pixels (128 x 128 pixels)
Screen resolution	20,480 pixels (128 x 160 pixels)
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)
Drop proof	4 ft (1.2 m)
Vibration and shock	IEC 60068-2-6, 2.5g, 10 to 200 Hz, IEC 60068-2-27, 50g 11ms
Power supply	Three (3) 1.5 V AA IEC LR6 alkaline batteries
Battery life	16 hours with display ON (Typical)
Auto power off	Selectable modes: OFF, 1 minute, 2 minutes, 5 minutes and 10 minutes
Certifications	  
Electromagnetic Compatibility	EN 61326-1, EN 61326-2 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. 0.66 lb (0.3 kg)