IR-700 Series
Infrared Thermometers

IR-708, IR-710, IR-720, IR-730 and IR-750

The Amprobe IR-700 series of infrared thermometers is a complete line of high performance diagnostic tools designed for HVAC/R, electrical, industrial maintenance, automotive as well as quality control and fire prevention applications. From simple spot checking to advanced data recording, the IR-700 series offers the right tool for the job.

Features

- **Extremely accurate and reliable**
- **Precise measurement** with distance to spot ratio from 8:1 to 50:1
- **Wide temperature ranges** available up to -58°F to 2822°F (-50°C to 1550°C)
- **Rapid response time**
- **Laser pointer** for accurate targeting
- **8 seconds auto display hold** for easy read-out
- **Adjustable emissivity** for measuring a variety of materials
- **Dual LCD display** with backlight
- **Selectable °F and °C**
- **Stores up to 99 data points** (IR-750 only)
- **Thermocouple input** (IR-750 only)
- **USB interface** (IR-750 only)

Laser Aperture
(front)

Dual LCD Display with Backlight

- **USB Connector**
- **K-type Thermocouple Connector**
- **Power Adaptor Connector** (for optional accessory)

Trigger

Battery Cover

IR-750
Infrared Thermometer
Distance to Spot 50:1

CE ⚠

Safety Certification
All Amprobe tools, including the Amprobe IR-700 Series, 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.

IR-700 Series Key Applications

Safely and easily verify temperature of major appliances, indoors and outdoors. Check the temperature of stoves, ovens and grills with a simple pull of the trigger.

The bright LCD display and red laser pointer make it easy to verify the temperature of fuses, insulation, light bulb housings, and more, even in dimly lit areas.

For precision measurements requiring the highest accuracy, emissivity can be adjusted for a wide range of material types (IR-720, IR-730 and IR-750).

The advanced IR-750 records up to 99 data points for minimum, maximum, average, and hold, and has a USB port to export data for extensive analysis.

Fast and Accurate from a Distance The IR-700 series measures temperature up to four times a second (250ms) allowing the units to precisely pinpoint hot and cold spots. With a distance to spot ratio of up to 50:1, the series is designed to measure temperature quickly and accurately without having to touch an object.

Easy to Read Display The bright, high-contrast backlit LCD screen has an eight-second hold for reading temperature, and a low battery indicator to help prevent false readings. All models display maximum and minimum temperature, while advanced models also offer average and difference measurements (IR-720, IR-730, IR-750).

Adjustable Emissivity for Precision Measurements The IR-700 series determines temperature by measuring emitted, reflected and transmitted energy. For enhanced accuracy, the emissivity can be adjusted to fit specific material types. Emissivity is digitally adjustable from 0.10 to 1.00 on the IR-720, IR-730 and IR-750.

IR-700 Series Selection Guide	IR-708	IR-710	IR-720	IR-730	IR-750
Features					
Distance to Spot (D:S)	8:1	10:1	20:1	30:1	50:1
Temperature Range	0°F to 716°F -18°C to 380°C	0°F to 716°F -18°C to 380°C	-26°F to 1922°F -32°C to 1050°C	-26°F to 2282°F -32°C to1250°C	-58°F to 2822°F -50°C to1550°C
Best Accuracy	±2%				
Emissivity for measuring a variety of materials	0.95		Adjustable from 0.10 to 1.00		
Display Resolution	0.1°C / 0.1°F				0.1°C / 0.1°F of reading < 999.9
MIN/MAX Memory	•	•	•	•	•
DIF/AVG Temperature Display			•	•	•
Tripod mount			•	•	•
Programmable high and low alarm					•
USB interface					•
Built in memory					99
K-Type thermocouple measurement					•
Warranty	1 year				

IR-700 Series
Specifications

	IR-708	IR-710	IR-720	IR-730	IR-750
Temperature Range	0°F to 716°F -18°C to 380°C	0°F to 716°F -18°C to 380°C	-26°F to 1922°F -32°C to 1050°C	-26°F to 2282°F -32°C to 1250°C	-58°F to 2822°F -50°C to 1550°C
Accuracy **With ambient operating temperature of 70°F to 77°F (21°C to 25°C)**	18°C to 10°C (-0.4°F to 50°F): ±2%+1°C (2°F), or ±3°C (±6°F), whichever is greater >10°C to 380°C (>50°F to 716°F): ±2%, or ±2°C (±4°F), whichever is greater		>0°C to 1250°C (>32°F to 2282°F): ±1.8% or ±1.8°C (±4°F), whichever is greater -32°C to 0°C (-26°F to 32°F): ±1.8%+1°C (2°F) or ±2.8°C (±6°F), whichever is greater		>0°C to 1550°C (>32°F to 2822°F): ±1.8% or ±1.8°C (±4°F), whichever is greater >-35°C to 0°C (-31°F to 32°F): ±1.8%+1°C (2°F) or ±2.8°C (±6°F), whichever is greater -50°C to -35°C (-58°F to -31°F): not specified (for reference only)
Repeatability	±0.5% of reading or ±1°F (±0.5°C), whichever is greater				
Display Resolution	0.1°F / 0.1°C				0.1°F / 0.1°C of reading < 999.9 0.2°F / 0.2°C of reading below 10°C (50°F) 1°F / 1°C of reading > 999.9
Spectral Response	8µm to14µm				
Laser Sighting	Single point laser				
Laser Power	Output > 1mW Class 2, wavelength 630 to 670nm				
Response Time (95%)	500 ms	500 ms	250 ms		
Distance to Spot (D:S)	**8:1**	**10:1**	**20:1**	**30:1**	**50:1**
Minimum Spot Size	20 mm	20 mm	25 mm	24 mm	19 mm
Emissivity	0.95	0.95	Digitally adjustable from 0.10 to 1.00 by 0.01. Pre-set emissivity is 0.95		
Ambient Operating Temperature	32°F to 122 °F 0°C to 50 °C				
Relative Humidity	0% to 75% non-condensing				
Storage Temperature	-4°F to 150°F / -20°C to 65°C				
Temperature Display	°F / °C selectable				
Display Hold	8 seconds				
MAX/MIN Temperature Display	•	•	•	•	•
DIF/AVG Temperature Display	–	–	•	•	•
Dual LCD Display	•	•	•	•	•
LCD Backlit	•	•	•	•	•
Low Battery Indication	•	•	•	•	•
Tripod mount	–	–	•	•	•
Power	9V 6F22 alkaline battery or equivalent				9V 6F22 alkaline battery or by power adaptor (output DC 6V/450mA)
Battery Life	10 hours with laser and backlight on 30 hours with laser and backlight off				
Dimension (H x L x W)	Approx.153 x 108 x 40 mm (6.0 x 4.5 x 1.6 in)		Approx.6.7 x 5.4 x 2.1 in (169 x 138 x 53 mm)		Approx.183 x 147 x 57 mm (7.2 x 5.8 x 2.3 in)
Weight	Approx.180 g (0.4 lb) with battery installed		Approx.0.64 lb (290 g) with battery installed		Approx.345 g (0.76 lb) with battery installed
Included Accessories	Battery and Instruction Manual		Carrying Bag, Battery and Instruction Manual (Battery not installed)		Software CD, USB Cable, K-type Thermocouple Probe, Carrying Bag, Hard Carrying Case, Battery and Instruction Manual
Optional Recommended Accessories (IR-750 only)	–				Power adaptor EPS-700-US (US plug), EPS-700-EUR (European plug)