

FLUKE®

The Fluke 66 and 68 Infrared Thermometers

Non-contact temperature measurement

Technical Data

The professional's diagnostic tool

The Fluke 66 and Fluke 68 non-contact thermometers are the ideal professional diagnostic tools for HVAC technicians performing room balance checks, electricians evaluating electrical connections and auto mechanics diagnosing catalytic converters. This handheld portable tool enables professionals to research heating and ventilation problems, monitor the status of electrical motors and electrical panels and diagnose car malfunctions with ease. They measure surface temperatures, helping to quickly locate potential blockages or malfunctioning systems reducing work time and improving performance.

The 60 series thermometers feature:

- Laser guided sighting system for easy targeting with 1 % accuracy.
- 12-point data logging.
- Advanced optics to measure smaller targets at greater distances.
- Adjustable emissivity for more accurate temperature measurements.
- Selectable MAX, MIN, DIF and AVG functions that display values instantly with Hi/Lo Alarm.
- Temperatures up to 760 °C (1400 °F) (68, 68IS).
- Intrinsically Safe model available (68IS)*.

Optical resolution

The laser sighting system guides measurements to the right target and indicates the approximate center of the measurement area.

(D:S = distance to spot using 90 % encircled energy at focal point).

The 68IS* model is available for the noncontact temperature monitoring needs of potentially explosive or flammable environments.

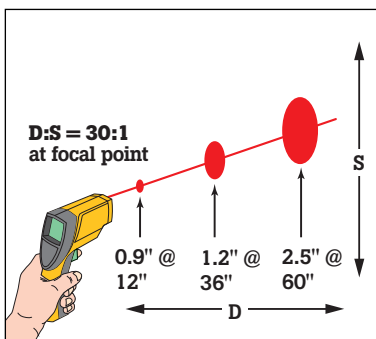
*Approved by Factory Mutual Research, a USA organization, for use in hazardous locations. The 68IS approval does not apply to atmosphere containing coal dust, grain dust, metal dust or fibers. Check your national and company regulations to determine if this approval is appropriate for your situation.



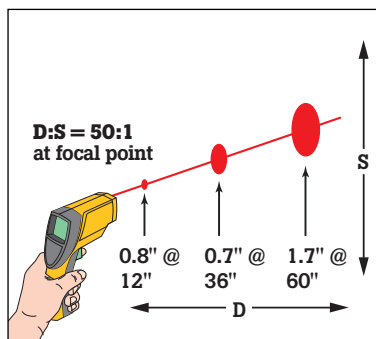
Specifications

	Fluke 66	Fluke 68/68IS*
Temperature range	-32 to 600 °C (-25 to 1100 °F)	-32 to 760 °C (-25 to 1400 °F)
Accuracy (assumes ambient operating temperature of 23 °C [73 °F])	-32 to -26 °C (-25 to -15 °F): ±3 °C (±5 °F) -26 to -18 °C (-15 to 0 °F): ±2.5 °C (±4 °F) -18 to 23 °C (0 to 73 °F): ±2 °C (±3 °F) For targets above 23 °C (73 °F): ±1 % or reading or ±1 °C (±2 °F), whichever is greater	
Repeatability	±0.5 % or ≤ ±1 °C (±2 °F), whichever is greater	
Response time	≤ 0.5 second (95 % of reading)	
Spectral response	8 to 14 μm	
Emissivity	Digitally adjustable emissivity (from 0.1 to 1.0 by 0.01)	
Ambient operating temp.	0 to 50 °C (32 to 120 °F)	
Relative humidity	10 to 90 % RH non-condensing, at <30 °C (86 °F) ambient	
Storage temperature	-20 to 60 °C (-13 to 158 °F) without battery	
Dimensions	200 x 160 x 55 mm (8 x 6 x 2 in.)	
Weight	320 g (11 oz.)	
Power	9 V alkaline or NiCd battery	
Batter life (alkaline)	20 hours with laser and backlight on 50 % 40 hours with laser and backlight off	
Laser sighting (Class II)	Offset single point laser point	
Typical distance to target	5 m (15 ft.)	8 m (25 ft.)
Distance to Spot (D:S)	30:1 at focus point	50:1 at focus point
MIN, MAX, AVG, DIF Temperature display	•	
Data logging	12 points	
Probe jack	•	
Display hold (7 seconds)	•	
Hi/Low alarm	•	
LCD backlit	•	
Temperature display	°C or °F selectable	
Display resolution	0.1 °C (0.1 °F)	
Hard carrying case	•	
Locking trigger	•	
Tripod mounting	6.35 mm (.25 in.) 20 UNC threading	
Warranty	2 years, conditional	

* Approved by Factory Mutual Research for use in hazardous locations.



Use the Fluke 66 within 5 m (15 ft.) of the intended target. At greater distances, the measured area will be larger (approximately the distance divided by 30).



Use the Fluke 68 and 68IS within 8 m (25 ft.) of the intended target. At greater distances, the measured area will be larger (approximately the distance divided by 50).

Ordering information

Fluke 66 Infrared Thermometer
Fluke 68 Infrared Thermometer
Fluke 68IS Infrared Thermometer

Included



Optional accessories:

- RTD temperature probe (standard w/68IS) 32 °C to 260 °C (-25 °F to 500 °F)
- Non-contact thermometer holster



*Included w/68IS

Standard Feature (68IS only)

- Factory Mutual Research Intrinsically Safe approval, including probe (Intrinsically safe, Class 1 Division 1 Groups A, B, C, D Class I, Zone 0, AEx ia IIC, T4 at 50 °C when used with 9V alkaline battery.) Groups A, B, C, D refers to: Acetylene, Hydrogen, Ethylene and Propane.

Fluke. Keeping your world up and running.

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Printed in U.S.A. 6/2005 2153543 D-US-N Rev C

The Fluke 63 Infrared Thermometer

Non-contact temperature measurement

Technical Data

The professional's diagnostic tool

The Fluke 63 non-contact thermometer is the ideal professional diagnostic tool for quick and accurate temperature measurements. This handheld portable tool enables professionals to research heating and ventilation problems, monitor the status of electrical motors and electrical panels and diagnose car malfunctions with ease.

Features include:

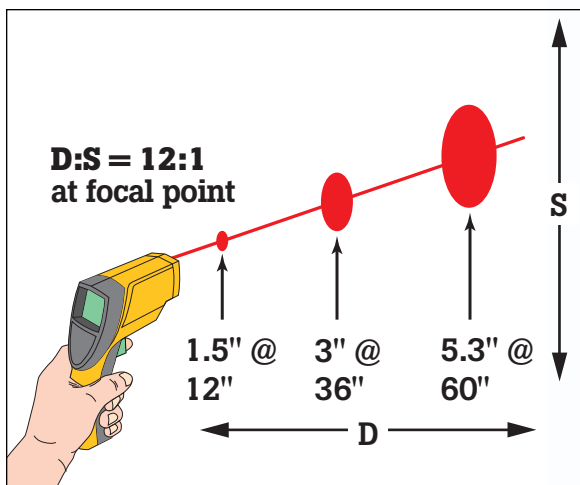
- Expanded measurement range up to 535 °C (999 °F)
- High-resolution optics
- High accuracy: 1 % and repeatability: 0.5 %
- MAX temperature display
- Laser targeting
- Backlit display

The Fluke 63 thermometer makes troubleshooting quick and easy. The single dot laser sighting system guides measurements to the right target and in less than a second, the large temperature display provides current and MAX surface temperatures. The locking trigger and tripod mount capability allow for continuous temperature monitoring.

Optical resolution

The single dot laser sighting system guides measurements to the right target and indicates the approximate center of the measurement area.

D:S (distance to spot using 90 % encircled energy at focal point.)



Use the Fluke 63 within six feet of the intended target. At greater distances, the measured area will be larger (approximately the distance divided by 12). The Fluke 63 offset single-point laser indicates the approximate center of the measurement area.



Specifications

Temperature range	-32 to 535 °C (-25 to 999 °F)
Accuracy (Assumes ambient operating temperature of 23 °C [73 °F])	-32 to -26 °C (-25 to -15 °F): ±3 °C (±5 °F) -26 to -18 °C (-15 to 0 °F): ±2.5 °C (±4 °F) -18 to 23 °C (0 to 73 °F): ±2 °C (±3 °F) 23 to 510 °C (73 to 950 °F): ±1 % of reading or ±1 °C (±2 °F), whichever is greater Above 510 °C (950 °F): ±1.5 % of reading
Repeatability	±0.5 % or ≤ ±1 °C (±2 °F), whichever is greater
Response time	≤ 0.5 second (95 % of reading)
Spectral response	8 to 14 μm
Emissivity	Pre-set at 0.95
Ambient operating temp	0 to 50 °C (32 to 120 °F)
Relative humidity	10 to 90 %
Storage temperature	-20 to 60 °C (-13 to 158 °F) without battery
Dimensions	200 x 160 x 55 mm (8 x 6 x 2 in.)
Weight	320 g (11 oz.)
Power	9 V alkaline or NiCd battery
Batter life (alkaline)	10 hours with laser and backlight on 40 hours with laser and backlight off
Typical distance to target	Up to 2 m (6 ft.)
Distance to Spot ratio	12:1
Max temperature display	•
Display hold (7 seconds)	•
LCD backlit	•
Temperature display	°C or °F selectable
Display resolution	0.2 °C (0.5 °F)
Hard carrying case	•
Tripod mounting	•
Warranty	2 years, conditional

Optional accessories:

- Non-contact thermometer holster



Ordering information

Fluke 63 Infrared Thermometer

Included



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The Fluke 62 Mini Infrared Thermometer

Non-contact temperature measurement

Non-contact diagnostic tool

The Fluke 62 Mini infrared thermometer is a non-contact diagnostic tool for quick basic temperature checks in applications where a technician is close to the target object. Simple to use, the Fluke 62 Mini enables technicians to discover temperature discrepancies before they become problems. Professionals can troubleshoot maintenance problems by measuring surface temperatures of motors, electrical equipment, insulated walls and pipes, heating, ventilation and refrigeration systems all from a safe distance.

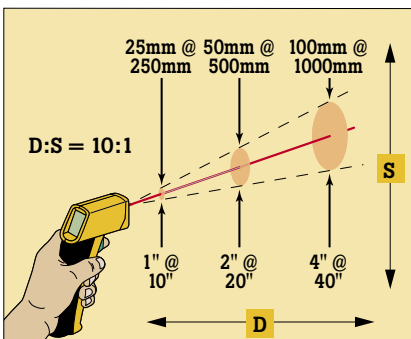
Features include:

- Temperature measurement range up to 500 °C (932 °F)
- High-resolution optics
- Accurate to within $\pm 1\%$ of reading
- MAX temperature display
- Laser sighting
- Backlit display

Compact and convenient, the Fluke 62 Mini thermometer makes troubleshooting quick and easy and is useful anywhere that temperature plays a role in product quality or equipment maintenance. The single dot laser indicates the center of the target; the large temperature display provides current and MAX surface temperatures.

Optical resolution

Use the Fluke 62 Mini within six feet of the intended target. At greater distances, the measured area will be larger (approximately the distance divided by 10). The Fluke offset single-point laser indicates the approximate center of the measurement area.



The single dot laser system indicates the approximate center of the measurement area.

Technical Data

Specifications

Measurement range	-30 °C to 500 °C (-20 °F to 932 °F)
Accuracy	10 °C to 30 °C (50 °F to 86 °F): ± 1 °C (2 °F) Outside 10 °C to 30 °C (50 °F to 86 °F): ± 1.5 °C (3 °F) or ± 1.5% of reading, whichever is greater
Repeatability	±0.5% of reading or ≤ ±1 °C (±2 °F), whichever is greater
Emissivity	Preset 0.95
Response time	< 500 mSec
Distance to spot size	10:1 calculated @ 80% energy
Spectral range	6.5–18 microns thermopile detector
Display resolution	0.2 °C (0.5 °F)
Display hold (7 seconds)	•
LCD backlit	•
Temperature display	°C or °F selectable
Ambient operating range	0 to 50 °C (32 to 120 °F)
Relative humidity	10–90% RH non-condensing, @ up to 30 °C (86 °F)
Typical distance to target (spot)	Up to 2 m (6 ft)
Laser class II	Single offset laser
Weight/dimensions	200 g (7 oz); 152 x 101 x 38 mm (6 x 4 x 1.5 in)
Power	9 V Alkaline battery (included)
Battery life (alkaline)	12 hours
Storage temperature	-20 °C to 65 °C (-4 °F to 150 °F) without battery
Options/accessories:	Includes protective boot and storage holster
Warranty:	2 years (conditional)



Ordering information

Fluke 62 Mini Infrared Thermometer

Included: Storage Pouch



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Printed in U.S.A. 4/2005 2437622 D-US-N Rev A

