



# The Fluke 66 and 68 Infrared Thermometers

Non-contact temperature measurement

## Technical Data

### The professional's diagnostic tool

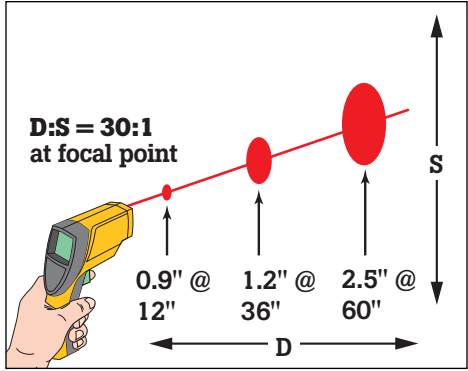
The Fluke 66 and Fluke 68 non-contact thermometers are the ideal professional diagnostic tools for HVAC technicians performing room balance checks, electricians evaluating electrical connections and auto mechanics diagnosing catalytic converters. This handheld portable tool enables professionals to research 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:

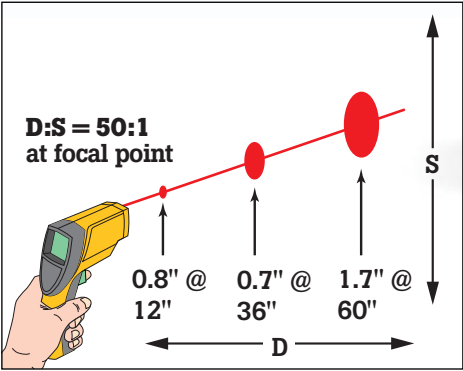
- Laser guided sighting system for easy targeting with 1 % accuracy.
- 12-point data logging.
- Advanced optics to measure smaller targets at greater distances.
- Adjustable emissivity for more accurate temperature measurements.
- Selectable MAX, MIN, DIF and AVG functions that display values instantly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

### 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).



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

# instrumentation

## Systems & Services Ltd

### Specifications

	Fluke 66	Fluke 68
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 backlight	•	
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	1 year	

### Optional accessories:

- RTD temperature probe
- Non-contact thermometer holster



### Ordering information

**Fluke 66** Infrared Thermometer  
**Fluke 68** Infrared Thermometer

### Included



**Fluke.** Keeping your world  
up and running.

**Fluke Corporation**  
 PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.  
 PO Box 1186, 5602 BD  
 Eindhoven, The Netherlands

For more information call:  
 In the U.S.A. (800) 443-5853 or  
 Fax (425) 446-5116  
 In Europe/M-East/Africa (31 40) 2 675 200 or  
 Fax (31 40) 2 675 222  
 In Canada (800) 36-FLUKE or  
 Fax (905) 890-6866  
 From other countries +1 (425) 446-5500 or  
 Fax +1 (425) 446-5116  
 Web access: <http://www.fluke.com/>

©2004 Fluke Corporation. All rights reserved.  
 Printed in U.S.A. 5/2004 2153543 D-ENG-N Rev A

