



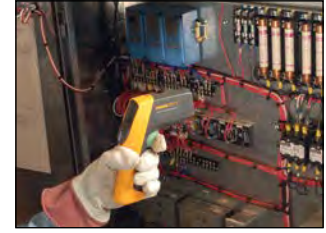
# Infrared Thermometers

Don't get burned by a motor, or have hot and cold air blowing in your face from your HVAC system or blowers while taking measurements. You can trust Fluke Infrared Thermometers to get accurate temperature readings from a safe distance.

# Infrared Thermometer Selection Guide

							
Temperature range	Fluke 62 MAX -30 to 500° C (-22° F to 932° F)	Fluke 62 MAX+ -30 to 650° C (-22° F to 1,202° F)	Fluke 64 MAX -30 to 600° C (-22° F to 1,112° F)	Fluke 561 -40 to 550° C (-40° F to 1,022° F)	Fluke 566 -40 to 650° C (-40° F to 1,202° F)	Fluke 568/568Ex -40 to 800° C (-40° F to 1,472° F)	Fluke 572-2 -30 to 900° C (-22° F to 1,652° F)
Distance to spot	10:1	12:1	20:1	12:1	30:1	50:1	60:1
Thermometer display	Digital Infrared	Digital Infrared	Digital Infrared	Digital Infrared	Digital Infrared	Digital Infrared	Digital Infrared
Accuracy	1.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Response time	<500 ms	<300 ms	<500 ms	<500 ms	<500 ms	<500 ms	<500 ms
Recommended distance to spot	Up to 2 m (6.56 ft)	Up to 2 m (6.56 ft)	Up to 2 m (6.56 ft)	Up to 2.5 m (6.56 ft)	Up to 4.5 m (14.76 ft)	Up to 7.5 m (24.6 ft)	Up to 9 m (29.52 ft)
Adjustable emissivity	•	•	•	•	•	•	•
MIN/MAX readings	•	•	•	•	•	•	•
AVG readings	•	•	•	•	•	•	•
DIF readings	•	•	•	•	•	•	•
Backlit LCD	•	•	•	•	•	•	•
Audible Hi/Lo alarm			•		•	•	•
Visible Hi/Lo alarm			•		•	•	•
Includes contact probe				•			
Probe input (types)				Thermocouple K	Thermocouple K	Thermocouple K	Thermocouple K
Data logging (number of measurements)			99 points		20 points	99 points	99 points
PC interface						USB	USB 2.0
Software compatible						•	•

## Recommended Applications



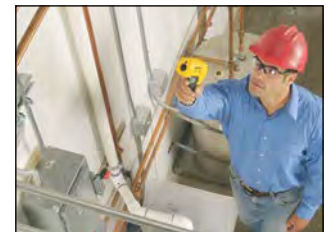
### Plant/Facilities Maintenance

Preventive and Predictive Maintenance  
Energy Audits  
Vehicle and Fleet Maintenance Programs  
Faulty Electrical/Circuit Connections  
Petrochemical/Hazardous Locations  
Motors, Pumps and Bearings



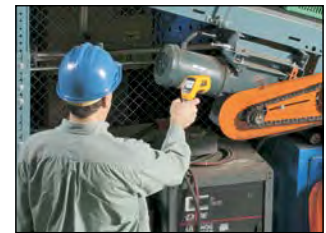
### Heating/Ventilation/Air Conditioning/Refrigeration

Leaky Ductwork  
Thermostats  
Temperature Balancing  
Steam Distribution Systems  
Compressor Lines



### Manufacturing Processes

Molding Temperature Measurement  
Printing  
Paper and Converting  
Thermoforming Plastics  
Electronics  
Paint Curing/Drying  
Food  
Chemical  
Pharmaceutical



### Safety and protection

Fire Localization  
Hazardous Materials  
Faulty Ballasts  
Search and Rescue  
Smoldering Embers  
Equipment Maintenance



# Fluke 60 Series Infrared Thermometers



Fluke 64 MAX

Fluke 62 MAX



## Fluke 62 MAX, 62 MAX+ and 64 MAX IR Thermometers

The Fluke 62 MAX, 62 MAX+ and new 64 MAX IR Thermometers have the precision you need to do your job accurately and will not break the budget. Designed and tested to survive a 3-meter drop, you can count on these lightweight, compact infrared thermometers to work when you need them to work—even in the harshest environments and when you're not able to be there.

- Precise laser technology for more accurate and repeatable measurements
- Temperature accuracy of up to  $\geq 0^\circ\text{C}$ :  $\pm 1^\circ\text{C}$  or  $\pm 1\%$   $\geq$  of reading whichever is greater with 20:1 distance to spot ratio (64 MAX)
- Flashlight (64 MAX) and large, easy-to-read backlit LCD display for easy viewing even in dark environment
- IP54 rated for extra protection against airborne contaminants
- Get your tool to work when you can't—set time and desired interval between measurements and Auto Capture will capture spot temperatures unattended (64 MAX)
- 99 data point logging (64 MAX)
- Displays the minimum, maximum or average temperature, or the difference between two measurements
- Hi and Lo alarms for rapid display of measurements outside set limits
- Dual rotating lasers to help you identify area to be measured (62 MAX+)
- Small and lightweight, fits easily into your tool box
- Three-year warranty

Specifications	62 MAX	62 MAX+	64 MAX
Temperature range	-30° C to 500° C (-22° F to 932° F)	-30° C to 650° C (-22° F to 1,202° F)	-30° C to 600° C (-22° F to 1,112° F)
Accuracy	$\pm 1.5^\circ\text{C}$ or $\pm 1.5\%$ of reading, whichever is greater  -10° C to 0° C: $\pm 2.0$ -30° C to -10° C: $\pm 3.0$ (14° F to 32° F: $\pm 2.0$ -22° F to 14° C: $\pm 3.0$ )	$\pm 1.0^\circ\text{C}$ or $\pm 1.0\%$ of reading, whichever is greater  -10° C to 0° C: $\pm 2.0$ -30° C to -10° C: $\pm 3.0$ (14° F to 32° F: $\pm 2.0$ -22° F to 14° C: $\pm 3.0$ )	$\pm 1.0^\circ\text{C}$ or $\pm 1.0\%$ of reading, whichever is greater  -10° C to 0° C: $\pm 2.0$ -30° C to -10° C: $\pm 3.0$ (14° F to 32° F: $\pm 2.0$ -22° F to 14° C: $\pm 3.0$ )
Emissivity	0.10 to 1.00		
Optical resolution	10:1 (calculated at 90% energy)	12:1 (calculated at 90% energy)	20:1 (calculated at 90% energy)
Compliance	IEC 61010-1: 2001		
Laser safety	FDA and IEC 60825-1 Class 2		



## Recommended Accessory


**TI-TRIPOD**  
Tripod Mounting  
Accessory for 64 MAX

## Recommended Kits Bundle & Save

**Fluke 116/62 MAX+ Technician's Combo Kit**

**Fluke T6-600/62 MAX+/1AC-II Infrared Thermometer and Electrical Tester Kit**

**Fluke 417D/62MAX+ Laser Distance Meter/Infrared Thermometer Combo Kit**

**Fluke 62MAX+/323/1AC Combo Kit**

## Included Accessories

**Fluke 64 MAX, 62 MAX and 62 MAX+:** Two AA Batteries and Instruction Sheet.

## Ordering Information

**FLUKE-64 MAX** Single Laser IR Thermometer, 10:1 Spot

**FLUKE-62 MAX+** Dual Laser IR Thermometer, 12:1 Spot

**FLUKE 62 MAX+/323/1AC** IR Thermometer Clamp Meter and Voltage Detector Kit

**FLUKE-64 MAX** IR Thermometer

**FLUKE-T6-600/62MAX+/1AC** T6-600 Tester, 62MAX+ and 1AC-II Combo Kit

**1587KIT/62 MAX+** 2-in-1 ADV Elec Kit with 62MAX+ i400 AC Current Clamp

Contact your local distributor for price and availability.  
fluke.com/wtb



# Fluke 560 and 570 Series Infrared Thermometers



Fluke 568

Fluke 561



## Fluke 561, 566 and 568 Infrared and Contact Thermometers

With a straight-forward user interface and soft-key menus, the Fluke 561, 566 and 568 make even complex measurements easy. With just a few pushes of a button you can easily adjust emissivity, start data logging, or turn on and off alarms. With a rugged, easy-to-use design, the Fluke 561, 566 and 568 can stand up to tough industrial, electrical, and mechanical environments.

- Confidently measure more surfaces, with adjustable emissivity and built-in materials table
- Log and download measurements for reporting (568)
- Audible and visual alarms
- MIN/MAX/DIF functions
- Includes KTC bead probe and compatible with any K-type thermocouple
- Two-year warranty

Specifications	561	566	568/568 Ex
Infrared temperature range	-40° C to 535° C (-40 to 995° F)	-40° C to 650° C (-40 to 1,202° F)	-40° C to 800° C (-40 to 1,472° F)
Accuracy	Greater of $\pm 1\%$ or $\pm 1^\circ\text{C}$		
Distance to Spot (D:S)	12:1	30:1	50:1
Sighting	Laser point		
Typical distance to target	Up to 2.5 m (8.2 ft)	Up to 4.5 m (14.76 ft)	Up to 7.5 m (24.6 ft)
Contact temperature range	-40° C to 550° C (-40° F to 1,022° F)	-270° C to 1372° C (-454° F to 2,501.6° F)	
Number of on-board memory locations	—	20	99
PC download and software	—	—	FlukeView™ Forms
Material type adjustment (emissivity)	Hi/Med/Lo	Material table or 0.1 to 1.00 by 0.01	
High and low alarms	—	High and low alarms	

## Fluke 572-2 High Temperature Infrared Thermometer

The Fluke 572-2 Infrared Thermometer is the one product you can use in high temperature industrial environments all around the world. This is the best choice for when you need accurate results for high temperature readings from a long distance.

- Measure -30° C to 900° C (-22° F to 1,652° F)
- 60:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Last reading Hold (20 seconds)
- High and low temperature alarm
- Data storage and review (99 data sets)
- Compatible with standard mini-connector K-type thermocouples, including ones you already own
- Current Temperature plus MAX, MIN, DIF, AVG displays
- Adjustable emissivity and predefined emissivity table
- FlukeView™ Forms documenting software
- Two-year warranty



Fluke 572-2



Specifications	572-2
Infrared temperature range	-30° C to 900° C (-22° F to 1,652° F)
Infrared accuracy (calibration geometry with ambient temperature 23° C $\pm 2^\circ\text{C}$ )	$\geq 0^\circ\text{C}$ : $\pm 1^\circ\text{C}$ or $\pm 1\%$ of the reading, whichever is greater $\geq -10^\circ\text{C}$ (14° F) to $< 0^\circ\text{C}$ (32° F): $\pm 2^\circ\text{C}$ (3.6° F) $< -10^\circ\text{C}$ (14° F): $\pm 3^\circ\text{C}$ (5.4° F)
Distance:Spot	60:1
Laser sighting	Offset dual laser, output $< 1\text{ mW}$
Hi/Low alarms	Audible and two-color visual
Min/Max/Avg/Dif	Yes
Data storage	99 points
K-type thermocouple input temperature range	-270° C to 1372° C (-454° F to 2,501.6° F)
K-type thermocouple input accuracy (with ambient temperature 23° C $\pm 2^\circ\text{C}$ )	$< -40^\circ\text{C}$ : $\pm (1^\circ\text{C} + 0.2^\circ/1^\circ\text{C})$ $\geq -40^\circ\text{C}$ : $\pm 1^\circ\text{C}$ or $1^\circ\text{C}$ , whichever is greater

## Specialty Model

### Fluke 568Ex Intrinsically Safe Infrared Thermometer



- Measure -40° C to 800° C (-40° F to 1,472° F)
- 50:1 distance to spot ratio with dual laser sighting for fast, accurate targeting
- Display resolution 0.1° C of reading
- Adjustable emissivity and predefined emissivity table
- Safety Certification ATEX/IECEx for Class 1, Div 1, Div 2, Zone 1 and 2 hazardous environments

## Recommended Accessories



**80PK-22**  
SureGrip™ Immersion Probe



**80PK-27**  
SureGrip™ Surface Temperature Probe



**80PK-8**  
Pipe Clamp Probe



**80PK-11**  
Pipe Clamp Probe



**80PK-18**  
Pipe Clamp Probe Kit



**C1600**  
Gear Tool Box

## Included Accessories

**560 Series:** Thermocouple K-type Velcro Pipe Probe (561 only), K-type Thermocouple Bead Probe (566 & 568 only), FlukeView™ Forms Software (568 only), USB Cable (568 only), Hard Carrying Case, Two AA Batteries and User Manual with Measurement Guide.

**572-2:** K-type Thermocouple Bead Probe, USB 2.0 Computer Interface Cable, FlukeView™ Forms Documenting Software, Hard Carrying Case, Getting Started Guide and User Manual (CD).

## Ordering Information

<b>FLK-572-2</b>	IR Thermometer
<b>FLUKE-561</b>	HVACPro Infrared Thermometer
<b>FLUKE-566</b>	IR Thermometer
<b>FLUKE-568</b>	IR Thermometer
<b>FLUKE-568 Ex</b>	Intrinsically Safe IR Thermometer

# Fluke 50 Series II Thermometers

Lab accuracy in a field thermometer



Fluke 54 II B

Fluke 53 II B



The Fluke 50 Series II Contact Thermometers offer fast response and laboratory accuracy in a rugged handheld test tool.

- Laboratory accuracy:  $\pm(0.05\% + 0.3^\circ\text{C})$
- Large backlit dual display
- Min/Max/Avg
- Electronic offset function maximizes overall accuracy
- Supports a wide range of thermocouple types
- Temperatures displayed in  $^\circ\text{C}$ ,  $^\circ\text{F}$ , or Kelvin (K)
- Three-year warranty

## Powerful data logging capabilities

The Fluke 53 II B and 54 II B can log up to 500 points of data to internal memory.

- User-adjustable recording intervals
- Real-time clock captures the exact event time
- Recall function lets logged data be easily reviewed
- Download data to optional FlukeView™ PC software



Fluke 51 II

Fluke 52 II

Specifications	51 II	52 II	53 II B	54 II B
Thermocouple types	J,K,T,E	J,K,T,E	J,K,T,E,N,R,S	J,K,T,E,N,R,S
Number of inputs	Single	Dual	Single	Dual
Time stamp	Relative Time	Relative Time	Time of Day	Time of Day
Dual display with backlight	•	•	•	•
Min/Max/Avg recording	•	•	•	•
(T <sub>1</sub> -T <sub>2</sub> ) True differential	-	•	-	•
Data logging up to 500 points	-	-	•	•
IR data port for interface to PC	-	-	•	•
Compatible with FlukeView™ Software	-	-	•	•
Battery life	1000 hours typical, AA			
Size (HxWxD)	173 mm × 86 mm × 38 mm			
Weight	0.4 kg			

## Temperature range and accuracy

J-type Thermocouples	-210° C to 1200° C (-346° F to 2,192° F)
K-type Thermocouples	-200° C to 1372° C (-328° F to 2,501.6° F)
T-type Thermocouples	-250° C to 400° C (-418° F to 752° F)
E-type Thermocouples	-150° C to 1000° C (-238° F to 1,832° F)
N-type** Thermocouples	-200° C to 1300° C (-328° F to 2,372° F)
R** and S-type** Thermocouples	0° C to 1767° C (32° F to 3,212.6° F)

## Temperature accuracy above -100° C:

J, K, T, E, and N-type**	$\pm[0.05\% + 0.3^\circ\text{C}]$
R** and S-type**	$\pm[0.05\% + 0.4^\circ\text{C}]$

## Temperature accuracy below -100° C:

J, K, E, and N-types	$\pm[0.20\% + 0.3^\circ\text{C}]$
T-type	$\pm[0.50\% + 0.3^\circ\text{C}]$

## Recommended Accessories



**Fluke 80PK-25**  
SureGrip™ Piercing Temperature Probe



**Fluke 80PK-27**  
SureGrip™ Industrial Surface Temperature Probe



**Fluke 80PK-10**  
Pipe Clamp Temperature Probe

## Included Accessories

**Fluke 50 Series Thermometers:** Impact Absorbing Holster, Two Bead Probe Thermocouples 80PK-1 (54 and 52 only), One Bead Probe Thermocouple, 80PK-1 (51 and 53 only).

## Ordering Information

<b>FLUKE 51 II</b>	Single Input Digital Thermometer
<b>FLUKE 52 II</b>	Dual Input Digital Thermometer
<b>FLUKE 53 II B</b>	Single Input Digital Thermometer with Data Logging
<b>FLUKE 54 II B</b>	Dual Input Digital Thermometer with Data Logging

Contact your local distributor for price and availability.  
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Infrared and Field Thermometers

