

TECHNICAL DATA

# 561 HVAC Infrared & Contact Thermometer



## Key features

- Contact and non-contact IR thermometer for measuring up close or at a distance, without a ladder
- Measures temperature from -40°C to 550° C (-40°F to 1022°F)
- Works with all standard mini-connector type K thermocouples
- Provides single-point laser sighting
- Allows easy emissivity adjustment for measuring pipes and other shiny surfaces more accurately

## Product overview: 561 HVAC Infrared & Contact Thermometer

### Fluke 561 IR and contact thermometer meets the needs of most industrial and residential temperature applications

The Fluke 561 IR contact thermometer combines the temperature measurement functions that industrial, electrical, and HVAC/R professionals need in one tool. It is an IR thermometer for non-contact measurements, with K-type thermocouple capability for contact temperature measurement. It's fast, efficient, and easy to use, saving you valuable time and effort.

Use the 561 IR capabilities to scan large areas or small objects quickly and efficiently, without having to shut down equipment. Measure hot, moving, electrically energized, and hard-to-reach objects instantly. Check motors, insulation, breakers, radiant heating, pipes, corroded connections, and wires. Plus, scan ducts, and other hard-to-reach objects from the floor and leave your ladder in the truck.

You can also use the Fluke 561's handy flexible pipe probe (included) to take super-heat or internal temperatures. Or plug in any industry standard type K mini connector thermocouple probe to take those measurements and preserve your investment in thermocouples you already own.

**Other useful features:**

- Features fabric hook-and-loop fastener pipe probe for superheat, sub-cooling, and other contact and ambient measurements
- Provides MIN, MAX, and DIF functions to help you quickly identify problems
- Weighs only 12 ounces/340 grams) and is extremely easy to use

## Specifications: 561 HVAC Infrared & Contact Thermometer

General Specifications	
Temperature	-40 to 550°C (-40 to 1022°F)
Display resolution	0.1°C (0.1°F) of reading
D:S (distance to spot size)	12:1
Easy emissivity selector	Adjustable with three settings:
	Low (0.3), medium (0.7), high (0.95)
Display accuracy [assumes ambient operating temperature of 23°C (73°F) to 25°C (77°F)]	±1.0% of reading ±1% of reading or ±1°C (±2°F), whichever is greater below 0°C / 32°F, ±1°C (±2°F) ±0.1°/1°
Response time	500 mSec (95% of reading)
Repeatability	±0.5% of reading or ±1°C (±2°F), whichever is greater
Spectral response	8 μm to 14 μm
Laser sighting	Single point laser
Laser shutoff	Laser turns off above ambient temperature of 40°C (104°F)
Laser power	Class 2(II) operation; Output < 1 mW, wavelength 630-670 nm
Relative humidity	10% to 90% RH non-condensing, at < 30°C (86°F)
Power, battery life	2 AA batteries (alkaline or NiCD)
Battery life	12 hours
Display hold	7 seconds
Backlit display	Yes, LCD with dual temperatures (current and MAX/MIN/DIF/KTC), low battery, F/C indicator, and Scan/Hold options
Warranty	2 years
Operating temperature	0°C to 50°C (32°F to 120°F)
Storage temperature	-20°C to 65°C (-25°F to 150°F)
MAX, MIN, DIF temperatures	Yes
Thermocouple Type K mini adapter input	Yes, compatible with industry standard K type probes with mini-connector. Displays to the thermometer temperature range.



Thermocouple Type K fabric hook-and-loop fastener pipe probe	Yes, with a temperature range of 0°C to 100°C (32°F to 212°F) and accuracy of $\pm 2.2^{\circ}\text{C}$ ( $\pm 4^{\circ}\text{F}$ )
HVAC measurement guide	Yes

## Ordering information



### **Fluke 561**

Fluke 561 Infrared and Contact Thermometer

Includes:

- K-Type thermocouple
- Fabric hook-and-loop fastener pipe probe
- Hard carrying case
- 2 AA batteries
- Users manual

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

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