

# FLUKE®

## The Fluke 568 Ex Intrinsically Safe Infrared Thermometer

Intrinsically safe  
temperature measurements.  
Anywhere in the world.

### Technical Data



The Fluke 568 Ex Intrinsically Safe Infrared Thermometer is the one product you can use in Class I Div 1 and Div 2 or Zone 1 and 2 hazardous environments anywhere in the world. Whether you work in petroleum, chemical, oil & gas or pharmaceutical environments, the new 568 Ex allows you to carry the most trusted name in test tools into most Ex rated areas all around the globe.

With a straight-forward user interface and soft-key menus, the Fluke 568 Ex makes even complex measurements easy. Quickly navigate and adjust emissivity, save data or turn on and off alarms, with just a few pushes of a button. All in a single intrinsically safe tool certified by major rating bodies from around the world.

### Product Highlights

With a rugged, easy-to-use, ergonomic design, the Fluke 568 Ex can stand up to tough industrial, electrical, and mechanical environments.

- Meets intrinsically safe certifications in Class I Div 1 and Div 2 or Zone 1 and 2 hazardous environments from recognized safety agencies around the world
- Measure -40 °C to 800 °C (-40 °F to 1472 °F)
- Conductive Case for carrying the IR thermometer safely into hazardous area
- Easily access advanced features with the soft-key buttons and graphical display
- Measure small objects from further away, with a distance-to-spot ratio of 50:1
- Compatible with mini-connector K-type thermocouple (KTC) probe
- Confidently measure a wide variety of surfaces with the adjustable emissivity feature, including a built-in material table
- Capture up to 99 points of data
- Confidently troubleshoot equipment with  $\pm 1\%$  measurement accuracy
- Versatile interface with five languages from which to choose
- Two-year warranty

Shop for Fluke products online at: [www.MyFlukeStore.ca](http://www.MyFlukeStore.ca) 1.800.561.8187

## Specifications

|                                             | Fluke 568 Ex Infrared Thermometer                                                                                                                                                                                                              |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infrared temperature range                  | -40 °C to 800 °C (-40 °F to 1472 °F)                                                                                                                                                                                                           |
| Infrared accuracy                           | < 0 °C (32 °F): $\pm (1.0 \text{ °C } (\pm 2.0 \text{ °F}) + 0.1/1 \text{ °C or °F})$ ;<br>≥ 0 °C (32 °F): $\pm 1 \%$ or $\pm 1.0 \text{ °C } (\pm 2.0 \text{ °F})$ ,<br>whichever is greater                                                  |
| Display resolution                          | 0.1 °C/0.1 °F                                                                                                                                                                                                                                  |
| Infrared spectral response                  | 8 µm to 14 µm                                                                                                                                                                                                                                  |
| Infrared response time                      | < 500 ms                                                                                                                                                                                                                                       |
| Thermocouple Type-K input temperature range | -270 °C to 1372 °C (-454 °F to 2501 °F)                                                                                                                                                                                                        |
| Thermocouple Type-K input accuracy          | < -40 °C: $\pm (1 \text{ °C } + 0.2 \text{ °/1 °C})$<br>≥ -40 °C: $\pm 1 \%$ or $1 \text{ °C}$ , whichever is greater<br>< -40 °F: $\pm (2 \text{ °F } + 0.2 \text{ °/1 °F})$<br>≥ -40 °F: $\pm 1 \%$ or $2 \text{ °F}$ , whichever is greater |
| D:S (distance to measurement spot size)     | 50:1                                                                                                                                                                                                                                           |
| Laser sighting                              | Single-point laser                                                                                                                                                                                                                             |
| Minimum spot size                           | 19 mm (0.75 in)                                                                                                                                                                                                                                |
| Emissivity adjustment                       | By built-in table of common materials or digitally adjustable from 0.10 to 1.00 by 0.01                                                                                                                                                        |
| Data storage                                | 99 points                                                                                                                                                                                                                                      |
| Hi/Low alarms                               | Audible and two-color visual                                                                                                                                                                                                                   |
| Min/Max/Avg/Dif                             | Yes                                                                                                                                                                                                                                            |
| Display                                     | Dot matrix with function menus                                                                                                                                                                                                                 |
| Backlight                                   | Two levels, normal and extra bright for darker environments                                                                                                                                                                                    |
| Trigger lock                                | Yes                                                                                                                                                                                                                                            |
| Switchable Celsius and Fahrenheit           | Yes                                                                                                                                                                                                                                            |
| Power                                       | 2 AAA/LR03 type-approved Batteries (For a list of type-approved batteries, refer to Product Safety Instructions)                                                                                                                               |
| Battery life                                | 4 hours with laser and backlight on; 100 hours with laser and backlight off, at 100 % duty cycle                                                                                                                                               |
| Operating temperature                       | 0 °C to 50 °C (32 °F to 122 °F)                                                                                                                                                                                                                |
| Storage temperature                         | -20 °C to 60 °C (-4 °F to 140 °F)                                                                                                                                                                                                              |
| Bead thermocouple Type-K range              | -40 °C to 260 °C (-40 °F to 500 °F)                                                                                                                                                                                                            |
| Bead thermocouple Type-K accuracy           | $\pm 1.1 \text{ °C } (2.0 \text{ °F})$ from 0 °C to 260 °C (32 °F to 500 °F), typically within $1.1 \text{ °C } (2.0 \text{ °F})$ from -40 °C to 0 °C (-40 °F to 32 °F)                                                                        |

## Safety Certifications

| Agency                                                                                               | Safety rating                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ATEX/IECEX<br>     | Zone 1 and 2<br>IECEX EPS 13.0006X<br>Ex ia IIC T4 Gb<br>0 °C ≤ Ta ≤ 50 °C<br>EPS 13 ATEX 1.525 X<br>II 2G Ex ia IIC T4 Gb                                                    |
| NEC-500/NEC-505<br> | Class I Division 1 and 2<br>Class I, Division 1, Groups ABCD T4<br>Class I, Division 2, Groups ABCD T4<br>Class I, Zone 1, AEx ia IIC T4<br>Ex ia IIC T4<br>0 °C ≤ Ta ≤ 50 °C |
| GOST<br>            | Zone 1 and 2<br>POCC DE.IB05.B<br>Ex ia IIC T4 Gb X<br>OT 0 °C до +50 °C<br>EPS 13 ATEX 1 525 X<br>II 2G Ex ia IIC T4 Gb<br>0 °C ≤ Ta ≤ 50 °C                                 |
| PCEC<br>            | Zone 1 and 2<br>PCEC<br>Ex ia IIC T4 Gb<br>CE13.<br>EPS 13 ATEX 1 525 X<br>II 2G Ex ia IIC T4 Gb<br>0 °C ≤ Ta ≤ 50 °C                                                         |
| INMETRO<br>       | Zone 1 and 2<br>IEx 13.0122X<br>Ex ia IIC T4 Gb<br>EPS 13 ATEX 1 525 X<br>II 2G Ex ia IIC T4 Gb<br>0 °C ≤ Ta ≤ 50 °C                                                          |

## Ordering information

**FLUKE-568** Ex Intrinsically Safe Infrared Thermometer

### Included equipment

- K-type thermocouple bead probe
- Conductive IS hard carrying case
- User's manual