



# The **ST&EK** 568 Ex Intrinsically Safe Infrared Thermometer

Intrinsically safe  
temperature measurements.  
Anywhere in the world.

## Technical Data



The **ST&EK** 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 **ST&EK** 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

## Specifications

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

## Safety Certifications

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

## Ordering information

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

### Included equipment

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