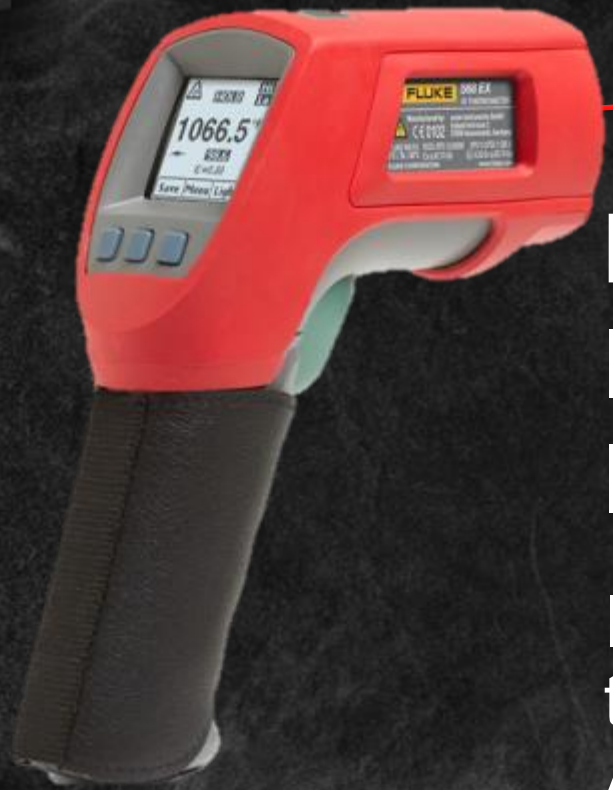
The Most Trusted Tools in the World.

FLUKE




# Fluke 568 Ex Intrinsically Safe Infrared Thermometer

Intrinsically safe temperature measurements. Anywhere in the world.

Product Announcement

# Product Overview

## Value Proposition

- Meets intrinsically safe certifications from all major safety agencies for Class I Div 1 and Div 2 or Zone 1 and 2 hazardous environments.
- One tool suitable for use anywhere in the world.
- Ideal for petroleum, chemical, oil & gas, or pharmaceutical environments.

## Product Highlights

- Measure -40 °C to 800 °C (-40 °F to 1472 °F) with ± 1 % measurement accuracy
- Conductive case for carrying into hazardous areas
- Access advanced features easily with soft-keys and graphical display
- Accurate measurements from further away, with 50:1 distance-to-spot ratio
- Compatible with standard K-type mini-connector thermocouple (KTC) probe
- Adjustable emissivity, built-in material table
- Capture up to 99 points of data
- Versatile interface with multiple languages (user select)
- Two-year warranty

# Who will buy

| Application | Segments | Temp Range | Accuracy | D:S | Opportunity |
|---|---|---|---|---|---|
| Repair and maintenance: Measure motor, pump to verify balanced phase-to-phase power distribution and proper operating temperature | Manufacturing Site  | 120 ° C | Low | Low - Medium | Traditional applications of IR Thermometers on **equipment maintenance** (electrical motor for balanced phase-to phase power distribution, motor bearings, motor winding insulation), **electrical maintenance** (transformers, ballasts, utilities, uninterruptible power supplies), and **process/product** monitoring temperature on production line such as rubber to plastics can be applied using 568Ex but the operating environment is considered hazardous where inflammable gases and vapor exists which can cause explosion.<br><br>Such environment usually exists in oil & gas, petrochemical, refinery, and pharmaceutical industry |
| Repair and maintenance: Measure panels, fuses, circuit brake, compressors, duct, vents in hard to reach areas | Installer, Contractor of Electrical/HVAC  | 200 ° C | Low | Medium - High | |
| Maintenance: Taking measurement of transformers, wires and components located high above ground. | Utilities  | 120 ° C | Low | High | |
| Maintenance & Quality control: Monitor the temperature during chemical processing | Chemical   | 800 ° C | Medium-high | Medium-High | |
| Maintenance: Exterior of the kiln temperature , Monitor the surface temperature of the reformer tubes | Petrochemical  | 800 ° C | Medium | Medium-High | |

568 Ex will serve the needs of customers who must comply with EH&S regulations to ensure safety while operating in a hazardous environment where hazardous gases and vapor are present

# Safety Certifications

| AGENCY | SAFETY RATING |
| --- | --- |
| ATEX/IECEx | 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 |

# What does it mean?

| Meaning of Marking: | | Zone 1 | IIC | T4 | 0°C ≤ Ta ≤ 50°C |
|---|---|---|---|---|---|
| Marking: | Class 1 | Division 1 | Groups ABCD | T4 | 0°C ≤ Ta ≤ 50°C |

**Type of Flammable Substance**

Class 1 - approved for strictest class

* Class 1 - Flammable gas, vapors, and liquids
* Class 2 - Combustible dusts
* Class 3 - Ignitable fibers and flyings

**Area Classification**

Division 1 - approved to the strictest division for both:

* Division 1 - flammable substances are continuously present or likely to exist under normal operating condition
* Division 2 - flammable substances are not likely to exist under normal operating condition

**Gas Group**

Group B - approved fro Group B, also approved for Groups C and D, but not A. If no Groups are listed, approved for all.

The gases are grouped according to certain physical characteristics on their explosive behavior

**Temperature Code**

If no temperature code is listed, meets strictest temperature code (T6)

This is the maximum temperature that the equipment is allowed to emit without causing an explosion/fire.

T4 in Zone 0, 1, 2 is equal to T4 and T4A in Division 1 and 2

Maximum Temperature T4 135 $^{0}$C (275 $^{0}$F) and T4A 120 $^{0}$C (248 $^{0}$F)

Ambient Temperature range ( 0°C ≤ Ta ≤ 50°C) is also marked.

# Understanding Zone vs Division

| Zone 0 | Zone 1 | Zone 2 |
|---|---|---|
| Where ignitable concentrations of flammable gases, vapors, or liquids are present continuously or for long periods of time under normal operating conditions. | Where ignitable concentrations of flammable gases, vapors, or liquids:<br>• Are likely to exist under normal operating conditions<br>• May exist frequently because of repair, maintenance operations, or leakage | Where ignitable concentrations of flammable gases, vapors, or liquids:<br>• Are not likely to exist under normal operating conditions<br>• Occur for only a short period of time<br>• Become hazardous only in case of an accident or some unusual operating condition |
| Division 1 | | Division 2 |
| Where ignitable concentrations of flammable gases, vapors, or liquids:<br>• Are likely to exist under normal operating conditions<br>• Exist frequently because of maintenance/repair work or frequent equipment failure | | Where ignitable concentrations of flammable gases, vapors, or liquids:<br>• Are not likely to exist under normal operating conditions<br>• Are normally in closed containers where the hazard can only escape through accidental rupture or breakdown of such containers or in case of abnormal operation of equipment |

**Table 2: Class 1 Group Comparison**

| Zone | Class/Division |
|---|---|
| IIC - Acetylene and Hydrogen | A — Acetylene |
| | B — Hydrogen |
| IIB — Ethylene | C — Ethylene |
| IIA — Propane | D — Propane |

# Fit in product line

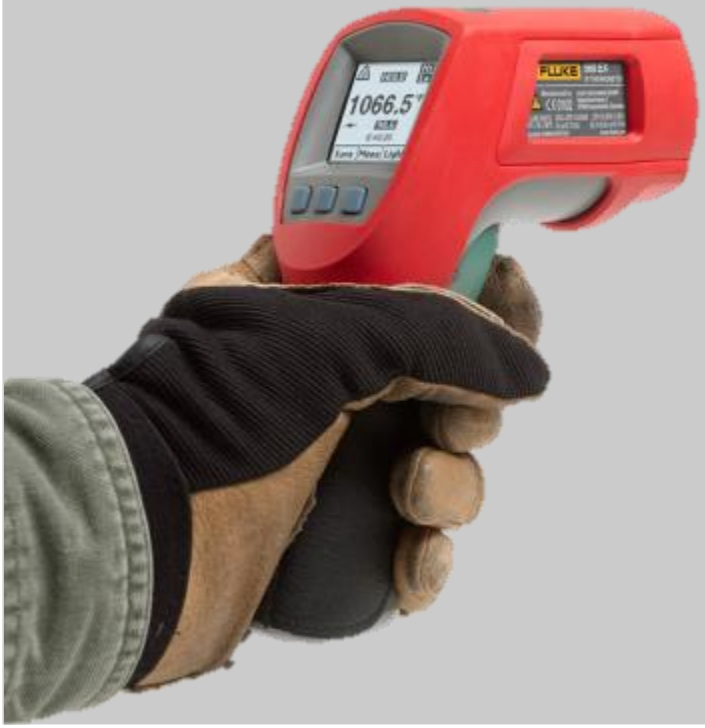
- 568 Ex offers performance similar to 566, 568, PLUS Ex certification
- Range, D:S slightly under the premium 572-2 High-Temperature Infrared Thermometer
- Fluke's only intrinsically safe infrared thermometer





| | Fluke 561 Infrared/Contact Thermometer | Fluke 566 Infrared/Contact Thermometer | Fluke 568 Infrared/Contact Thermometer | Fluke 568 Ex Intrinsically Safe Infrared Thermometer | Fluke 572-2 High-Temperature Infrared/Contact Thermometer |
|---|---|---|---|---|---|
| **Temperature Range** | -40 °C to 550 ° C<br>-40 °F to 1022 °F | 40 °C to 650 °C<br>-40 °F to 1202 °F | -40 °C to 800 °C<br>-40 °F to 1472 °F | -40 °C to 800 °C<br>-40 °F to 1472 °F | -30 °C to 900 °C<br>-22 °F to 1652 °F |
| **Distance to Spot Ratio** | 12:1 | 30:1 | 50:1 | 50:1 | 60:1 |
| **Laser Sighting** | Single point laser | Single point laser | Single point laser | Single point laser | Dual laser |
| **Emissivity** | Adjustable with three settings: Low (0.3), Medium (0.7). High (0.95) | By built-in table of common materials or digitally adjustable from 0.10 to 1.00 by 0.01 | By built-in table of common materials or digitally adjustable from 0.10 to 1.00 by 0.01 | By built-in table of common materials or digitally adjustable from 0.10 to 1.00 by 0.01 | Digitally adjustable from 0.10 to 1.00 by 0.01 or via built-in table of common materials |
| **Display Resolution** | 0.1°C (0.1 °F) of reading | 0.1°C (0.1 °F) of reading | 0.1°C (0.1 °F) of reading | 0.1°C (0.1 °F) of reading | 0.1°C (0.1 °F) of reading |
| **Backlight Display** | Yes | Two levels | Two levels | Two levels | Two levels, normal and extra bright for darker environments |

# Additional Features

| Items Included | Service Plan |
| --- | --- |
| • Fluke 568 EX Intrinsically Safe Infrared Thermometer with red holster and leather grip<br>• Conductive hard carrying case<br>• K-type thermocouple bead probe<br>• User's manual with safety instruction sheet<br>• Recommended accessories<br>  • 80PK-1 General Purpose Bead Probe<br><br>  <u>Following K-type probes are not Ex rated</u><br>  • 80PK-8 Pipe Clamp Temperature Probe<br>  • 80PK-9 Insulation-Piercing Probe<br>  • 80PK-11 Type-K Flexible Cuff Thermocouple Temperature Probe<br>  • 80PK-25 Piercing Probe<br>  • 80PK-26 Tapered Probe<br>  • 80PK-27 SureGrip™ Industrial Surface Temperature Probe | Fluke 568 Ex is backed by a two year warranty.<br><br>  |

| Order Details | 568 Ex |
|---|---|
| Open for Orders | August 14 |
| ATP | Three weeks |
| Sales Discounts | Same as TEMP discount |
| Fluke Model # | 568 EX |
| Fluke Oracle # | 4321662 |
| UPC Code | 0 95969 66613 8 |
| Description | FLUKE-568 EX,INTRINSIC SAFE IR THERMOMETER, ATEX APPROVAL |
| Country of Origin | Germany |
| ECCN | EAR99 |
| Harmonize | 9025198080 |
| WEEE Category | 9 |
| Dangerous Goods Category | No |
| Product Dimensions (H, W, D) | 17.69 cm H x 16.36 cm L x 5.18 cm W (6.965 in H x 6.441 in L x 2.039 in W) |
| Packaging Dimensions (H, W, D) | 25.2 cm L x 19.2 cm W x 6.9 cm H (9.921 in L x 7.559 in W x 2.717 H ) |
| Product Net Weight | 0.340 kg (0.7496 lb) |
| Package Net Weight | 0.968 kg (2.134 lb) |
| Battery Type | AAA |
| IEC Designator | LR03 |
| Cell Mass (g) | 12 |
| Rechargeable? | No |
| Dimensions (H, W, D) | 45 mm x 10.5 mm x 10.5 mm (1.77in x .41 in x .41 in) |
| Safety and Compliance | IEC 60825-1; FDA Laser Class II; EMC 61326-1; CE Complaint |