

Fluke products designed to intrinsic safety standards

A protection method employed in potentially explosive atmospheres, intrinsically safe devices are designed to be unable to release sufficient energy, by either thermal or electrical means, to cause ignition of flammable material (gas or dust/particulates).

Fluke products	ATEX certified	North American Certification
 28 II Ex: Intrinsically Safe True-rms Multimeter	 II 2G Ex ia IIC T4 Gb II 2D Ex ia IIC T130 °C Db I M1 Ex ia I Ma	 Class I Zone 1 AEx ia IIC T4 Class II Zone 21 AEx iaD T130C USA and Canada Class 1 Div 1 Groups ABCD Class 1 Div 2 Groups ABCD Class 2 Div 1 Groups EFG Class III Ex ia IIC
 707Ex: Intrinsically Safe mA Calibrator	 II 2 G Ex ia IIC T4	 Class I, Div 2, Groups A-D
 718Ex: Intrinsically Safe Pressure Calibrator	 II 1 G Ex ia IIC T4	 I.S. Class I, Div 1, Groups A-D T4
 721Ex: Intrinsically Safe Precision Pressure Calibrator	 ATEX: II 2G Ex ia IIB T3 Gb	 IECEX II 2 G
 725Ex: Intrinsically Safe Multifunction Calibrator	 II 1 G Ex ia IIB 171 °C	 I.S. Class I, Div 1, Groups B-D, 171 °C
 700PEx: Intrinsically Safe Pressure Modules	 II 1 G Ex ia IIC T4	 I.S. Class I, Div 1, Groups A-D T4
 568Ex: Intrinsically Safe Infrared Thermometer	 ATEX/IECEX Zone 1 and 2	 NEC-500/NEC-505 Class I Division 1 and 2
 700G Series Intrinsically Safe Pressure Gauges	 II 3 G Ex ia IIB T6	 CSA Class I, Div. 2 Groups A-D rating
 1551A/1552A: Intrinsically Safe "Stik" Thermometer	 ATEX/IECEX Zone 1 and 2	 NEC-500/NEC-505 Class I Division 1 and 2

Ordering information

Models
FLUKE-28 II Ex IS True-rms Multimeter
FLUKE-568 Ex Intrinsically Safe Infrared Thermometer
FLUKE-700G Pressure test Gauge, 23 pressure ranges from 0 to 10 inH2O up to 10,000 psi
FLUKE-700PEx Pressure Modules (700P: 01, 05, 06, 09, 24, 27, 29, A4Ex)
FLUKE-707Ex IS Loop Calibrator
FLUKE-718Ex IS Pressure Calibrator
FLUKE-721Ex Precision Pressure Calibrator
FLUKE-725Ex IS Multifunction Process Calibrator
1551A Ex "Stik" Thermometer -50 °C to 160 °C (-58 °F to 320 °F)
1552A Ex "Stik" Thermometer -80 °C to 300 °C (-112 °F to 572 °F)

There are no global intrinsically safe standards or certifications, but there are organizations that influence directives in certain world geographies.



APPROVED

Factory Mutual

In the United States, Factory Mutual Research, managed by Factory Mutual (FM) Global, is a non-profit scientific and testing organization that has tested and certified over 40,000 products in the last 165 years. FM Research has set certification guidelines for equipment used in potentially explosive atmospheres.



Canadian Standards Association (CSA)

Accreditation body for North American regulations, based in Toronto, Canada.



ATEX

The primary intrinsically safe standard, which has been set in the European Union with the Directive 2014/34/EU (replacing the 94/9/EC), and commonly called ATEX 114 (Atmosphères Explosibles), French for explosive atmospheres.



ETL

Accreditation body for North American regulations, NEC-500/NEC-505.

Fluke 560 Series Infrared Thermometers

Stand up to tough industrial, electrical, HVAC, and mechanical environments

With a straight-forward user interface and soft-key menus, the Fluke 560 Series IR Thermometers make even complex measurements easy. With just a few pushes of a button you can easily adjust emissivity, record data, or turn on and off alarms.

- Measure up to 800 °C (1470 °F)
- Easily access advanced features with the soft-key buttons and graphical display
- Scan large areas or small objects; measure smaller objects from further away
- Compatibility with most type K thermocouples
- Confidently measure more surfaces, with adjustable emissivity and built-in materials table
- Log and download measurements for reporting (568)
- Audible and visual alarms alert you to measurements outside of set limits
- Pipe probe for superheat and sub-cooling; other contact and ambient measurements (561)
- Min/Max/Avg/Dif functions
- Includes KTC bead probe
- 1 % measurement accuracy

Specifications

	Fluke 561	Fluke 566	Fluke 568
Infrared temperature range	-40 °C to 535 °C (-40 °F to 995 °F)	-40 °C to 650 °C (-40 °F to 1202 °F)	-40 °C to 800 °C (-40 °F to 1472 °F)
Accuracy	Greater of $\pm 1\%$ or $\pm 1\text{ °C}$ (2 °F)		
Distance to Spot (D:S)	12:1	30:1	50:1
Sighting	Laser point		
Typical distance to target	Up to 2.5 m (7 ft)	Up to 4.5 m (15 ft)	Up to 7.5 m (25 ft)
Probe type	Thermocouple K		
Contact temperature range	-40 °C to 550 °C (-40 °F to 1022 °F)		-270 °C to 1372 °C (-454 °F to 2501 °F)
Number of on-board memory locations		20	99
PC download and software			Yes, with FlukeView® Forms
Soft-key feature menu navigation			•
Min/Max/Avg/Dif	Min/Max/Dif		Min/Max/Avg/Dif
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
Hands-free logging			•
Battery		2 AA	
Warranty		Two-year	



CE



CE



Ordering information

Models	Included accessories
FLUKE-568 Infrared Thermometer	USB cable, FlukeView® Forms software, thermocouple type K bead probe, carrying case, two AA batteries, users manual, quickstart guide
FLUKE-566 Infrared Thermometer	Thermocouple type K bead probe, carrying case, two AA batteries, users manual and quickstart guide
FLUKE-561 Infrared Thermometer	Thermocouple type K pipe probe, carrying case, two AA batteries, users manual
FLUKE-61 Infrared Thermometer	9 V battery, instruction sheet
FLUKE-63 Infrared Thermometer	Wrist strap, carrying case, 9 V battery, users manual

The 568 allows for temperature measurement of small components.

