

# Loop Calibrators



Fluke 707



## Fluke 707 Loop Calibrator

The fast, one-handed tool for loop checks. The Fluke 707 combines the best features of a push-button and knob-base loop calibrator.

- Large display with simple, push-button interface for ease of use
- Simultaneous mA and % readout for quick, easy, interpretation of readings
- mA accuracy of 0.015 %
- Push button 25 % steps for fast, easy linearity checks
- 0-100 % "Span Check" for fast confirmation of zero and span
- Selectable slow ramp, fast ramp and step provides smooth outputs for valve slewing and loop functional tests
- 24 V internal loop supply
- Innovative output adjustment dial with .001 mA and 0.1 mA resolution
- Selectable HART mode 250  $\Omega$  resistor in series with 24 V loop for compatibility with HART communicators

## Fluke 707Ex Intrinsicly Safe Loop Calibrator

The 707Ex includes the great features of the standard 707. It also is certified in accordance with the ATEX directive (II 2 G EEx ia IIC T4) and Factory Mutual N.I. Class 1, Division 2, Group A-D.

## Fluke 705 Loop Calibrator

- A large display and simple, push-button interface for ease of use
- Simultaneous mA and % readout for quick, easy, interpretation of readings
- mA accuracy of 0.02 %
- Push button 25 % steps for fast, easy linearity checks
- "Span Check" for fast confirmation of zero and span

## 715 Volt/mA Calibrator

- Measure loop current signals with 0.015 % accuracy and 0.001 mA resolution
- Measure voltage output process signals
- Source or simulate 24 mA loop current
- Source voltage to 100 mV or 10 V
- 24 V loop supply



Fluke 707Ex  
Intrinsicly Safe  
Loop Calibrator



Fluke 705



Fluke 715

## Ordering information

Fluke-707 Loop Calibrator

16 Fluke-707Ex Loop Calibrator

Fluke-705 Loop Calibrator

Fluke-715 Volt/mA Calibrator

Each calibrator includes test leads, test clips, holster, instruction sheets, NIST-traceable certificate of calibration; CE and CSA markings and 9 V alkaline battery.

**Summary specifications (18 °C to 28 °C, one year)**

Function	Range	705, 707, 707Ex, 715 Resolution	705 Accuracy	707, 707Ex, 715 Accuracy
Voltage measure	0 to 28 V	.001 V	.025 % Rdg + 1 LSD	± (.015 % Rdg + 2 counts)
Voltage source (715 only)	0 to 10 V	.001 V (715)	N/A	.02 % + 2 counts (715 only)
mA measure	0 to 24 mA	.001 mA	.02 % Rdg + 2 LSD	.015 % Rdg + 2 LSD
mA source1	0 to 24 mA	.001 mA	.02 % Rdg + 2 LSD	.015 % Rdg + 2 LSD
mA simulate2	0 to 24 mA	.001 mA	.02 % Rdg + 2 LSD	.015 % Rdg + 2 LSD
Loop supply	24 V dc	n/a	≥ 24 V, no load	≥ 24 V, no load

Temperature coefficient, - 10 to 18 °C, 28 to 55 °C, ± .005 % of range per °C

<sup>1</sup> Max load, 1200 Ohms; 950 Ohms at 20 mA in HART mode, 707Ex; 700 Ω

<sup>2</sup> Max applied voltage for simulation, 30 V, 707Ex; 28 V

**General specifications for the Fluke 705, 707 and 707Ex calibrator**

**Maximum voltage:** 30 V (28 V - 707Ex)  
**Non-operating temperature:** -40 to 60 °C  
**Operating temperature:** -10 to 55 °C  
**Relative humidity:** 0 to 90 % (0 to 35 °C); 0 to 70 % (35 to 55 °C)  
**Operating altitude:** 3,000 meters maximum  
**Shock and vibration:** Per MIL-T-28800 for a Class 2 Instrument  
**Safety:** CSA C22.2 No. 1010.1: 1992  
**EMC:** EN50082-1:1992 and EN55022:1994 Class B  
**Size/weight:** 6.0 in L x 2.8 in W x 1.6 in D (152 mm L X 70 mm W x 41 mm D) 8 oz (224 g)  
**Size/weight with Holster:** 6.4 in L x 2.9 in W x 1.9 in D (164 mm L x 75 mm W x 47 mm D) 12.3 oz. (350 g)  
**Battery:** One 9 V alkaline  
**Battery life:** 18 hours typical, at 12 mA  
**Warranty:** Three years (one year, 707Ex)

**General specifications for Fluke 715 calibrator**

**Maximum voltage:** 30 V  
**Non-operating temperature:** -40 °C to 60 °C  
**Operating temperature:** -10 °C to 55 °C  
**Relative humidity:** 95 % (10 °C to 30 °C); 75 % (30 °C to 40 °C); 45 % (40 °C to 50 °C); 35 % (50 °C to 55 °C)  
**Operating altitude:** 3,000 meters maximum  
**Shock:** 1 meter drop test  
**Vibration:** Random, 2 g, 5-500 Hz  
**Safety:** CSA C22.2 No. 1010.1:1992  
**EMC:** EN50082-1:1992 and EN55022:1994 Class B  
**Size/weight:** 187 mm L x 87 mm W x 32 mm D (7.35 in L x 3.41 in W x 1.25 in D) 330 g (12 oz)  
**Size/weight (with holster and Flex-Stand™):** 201 mm L x 98 mm W x 52 mm D (7.93 in L x 3.86 in W x 2.06 in D) 600 g (21 oz)  
**Battery life:** 4 to 20 hours  
**Warranty:** Three years

