

# 705/707/707Ex/715 Loop Calibrators

FLUKE®



Fluke 705



Fluke 715



Fluke 707



Fluke 707Ex



## 4-20 mA, source, measure, simulate

### 705 Loop Calibrator

- Simultaneous mA and %
- mA accuracy of 0.02%
- Measure, source and simulate mA
- Push button 25% steps for fast, easy linearity checks
- "Span Check" for fast confirmation of zero and span
- Selectable slow ramp, fast ramp, and step function
- 24 volt internal loop supply
- 0 - 20 mA or 4 - 20 mA default start up modes

### 707 Loop Calibrator

- Features of the Fluke 705
- "Quick Click" detented rotary knob for one handed operation
- Higher accuracy: 0.015%
- Mains Voltage Input protection
- 250 Ohm loop resistance for with Hart instrumentation

### 715 Volt/mA Calibrator

- Measure loop current (0-20 mA, 4-20 mA) signals with 0.015% accuracy and 0.001 mA resolution
- Measure voltage output process signals from PLCs, transmitters
- Source or simulate 24 mA loop current
- Source voltage to 100 mV or 10V
- 24V loop supply with simultaneous current measurement

### 707Ex Intrinsic Safe Loop Calibrator

- Same features as Fluke 707
- For use in explosion endangered areas
- ATEX certified (Ex II 2 G Eex ia IIC T4)

## Specifications

Functions	705/707/707 Ex	715
<b>Voltage measurement</b>		
Range	0-28 V DC	0-100 mV, 0-10 V
Resolution	1 mV	10 µV 1 mV
Accuracy	705: 0.025% Rdg + 1 LSD 707/707Ex: 0.015% Rdg + 2 LSD	0.02% Rdg + 2 LSD
<b>Current measurement</b>		
Range	0-24 mA	0-24 mA
Resolution	0.001 mA	0.001 mA
Accuracy	705: 0.025% Rdg + 2 LSD 707/707Ex: 0.015% Rdg + 2 LSD	0.015%
<b>Current sourcing</b>		
Range	0-20 mA or 4-20 mA <sup>1</sup>	0-20 mA or 4-20 mA <sup>1</sup>
Accuracy	705: 0.025% Rdg + 2 LSD 707/707Ex: 0.015% Rdg + 2 LSD	0.015% + 2 LSD
Drive capability	705: 1000 Ω @ 24 mA 707: 1200 Ω @ 24 mA 707Ex: 700 Ω @ 20 mA	1000 Ω @ 24 mA
Loop power while measuring mA	24 V	24 V
Voltage sourcing	N/A	0-100 mV or 0-10 V
Display current and % of span	Yes	mA or %
Auto step, auto ramp	Yes	No
Span Check	Yes	No

<sup>1</sup> will over-range to 24 mA

### Fluke 705, 707, 707Ex

**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 max.  
**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 (HxWxD):** 164 mm x 75 mm x 47 mm;  
**Weight:** 0.35 kg  
**Battery:** One 9 V alkaline  
**Battery life:** 18 hours typical, at 12 mA  
**Warranty:** Three years (one year, 707Ex)

### 715

For general specifications see page 56  
**Size (HxWxD):** 201 mm x 98 mm x 52 mm  
**Weight:** 0.6 kg  
**Battery:** One 9V alkaline  
**Battery life:** 4 to 20 hours  
**Warranty:** Three years

## Included Accessories

**Fluke 705/707:** C10 Yellow Holster, TL75 Test Leads, AC72 Alligator Clips, Single 9V alkaline battery, Instruction Sheet  
**Fluke 707Ex:** Red Ex-holster, Fluke TL75 Test Leads, AC72 Alligator Clips, Single 9V alkaline battery, Instruction Sheet  
**Fluke 715:** Yellow Holster (H80M excl. TPAK), TL75 Test Leads and AC72 Alligator Clips, Single 9V alkaline battery, Instruction Sheet

## Ordering Information

Fluke 705 Loop Calibrator  
 Fluke 707 Loop Calibrator  
 Fluke 707Ex Intrinsic Safe Loop Calibrator  
 Fluke 715 Volt/mA Calibrator

## Recommended Accessories



C12A (705/707)



C25 (715)



TL220



TL28A



TPAK (715)