

# 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 10 V
- 24 V loop supply with simultaneous current measurement

### 707Ex Intrinsically Safe Loop Calibrator

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

## Specifications

Functions	705/707/707 Ex	715
<b>Voltage measurement</b>		
Range	0-28 V DC	0-200 mV, 0-20 V
Resolution	1 mV	10 µV 1 mV
Accuracy	705: 0.025% Rdg + 2 LSD 707/707Ex: 0.015% Rdg + 2 LSD	0.01% 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	Yes
Span Check	Yes	Yes

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

### Fluke 705, 707, 707Ex

Maximum voltage: 30 V (28 V - 707Ex)  
 Operating temperature: -10 to 55°C  
 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  
 Three Year Warranty

### 715

Size (HxWxD): 201 mm x 98 mm x 52 mm  
 Weight: 0.6 kg  
 Battery: One 9V alkaline  
 Battery life: 4 to 20 hours  
 Three Year Warranty

## Included Accessories

Fluke 705/707: C10 Yellow Holster, Test Leads, AC172 Alligator Clips, Single 9V alkaline battery, Instruction Sheet

Fluke 707Ex: Red Ex-holster, Test Leads, AC172 Alligator Clips, Single 9V alkaline battery, Instruction Sheet

Fluke 715: Yellow Holster (H80M excl. TPAK), Test Leads and AC172 Alligator Clips, Single 9V alkaline battery, Instruction Sheet

## Ordering Information

Fluke 705 Loop Calibrator

Fluke 707 Loop Calibrator

Fluke 707Ex Intrinsically Safe Loop Calibrator

Fluke 715 Volt/mA Calibrator

## Recommended Accessories

(Not for hazardous zones)



C12A (705/707)  
See page 130



C25 (715)  
See page 130



TL220-1  
See page 122



TP920  
See page 121



T PAK (715)  
See page 132