

# Fluke 715 mA Loop Calibrators

## Technical Data

### Fluke 715 Volt/mA Calibrator

#### Volt Milliamp Calibrator to troubleshoot process loops

The Fluke 715 Volt/mA Calibrator delivers outstanding performance, durability and reliability. Offered in the rugged Fluke 80 Series DMM package, the calibrator is compact, lightweight and easy to carry. With a push button interface similar to the multifunction Fluke 740 Series Documenting Process Calibrators, the 715 is easy to use. It is EMI tolerant, dust/splash resistant and features a removable battery door for quick battery changes. It features:

- Measure loop current (0 mA to 20 mA, 4 mA to 20 mA) signals with 0.01 % accuracy and 0.001 mA resolution
- Source precision voltage signals up to 20 V with 0.01 % accuracy
- Measure voltage output process signals from PLCs, transmitters
- Source or simulate 24 mA loop current
- 24 V loop supply with simultaneous current measurement

### Fluke 707 Loop Calibrator

#### The fastest, one-handed tool for loop checks

The Fluke 707 Loop Calibrator is a high performance solution for calibration, repair and maintenance of current loops. The "Quick Click" knob makes it extremely fast and easy to use. It features:

- One handed user interface with "Quick Click" detented knob
- mA sourcing, simulation and measurement
- 0.015 % accuracy and 0.001 mA resolution
- Simultaneous mA and % of span display
- Selectable step or ramp outputs
- 24 V Loop supply with mA measure, including 250 Ω HART resistor
- 0 V dc to 28 V dc measurement to check Loop Voltage
- Removable battery door for quick battery replacement
- Compact case with protective holster
- Three year warranty

### Fluke 705 Loop Calibrator

#### Low cost calibration muscle

The Fluke 705 Loop Calibrator is a cost-effective, integrated solution for calibration, repair and maintenance of current loops. It features:

- mA sourcing, simulation and measurement
- 0.02 % accuracy and 0.001 mA resolution
- Simultaneous mA and % of span display
- Selectable step or ramp outputs
- 24 V Loop supply with mA measure
- 0 V dc to 28 V dc measurement to check Loop Voltage
- Removable battery door for quick battery replacement
- Compact case with protective holster
- Three-year warranty



## General Specifications:

**Maximum voltage:** 30 volts: Non-operating temperature: -4 °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 m max

**Shock:** 1 m drop test

**Vibration:** Random, 2 g, 5 Hz to 500 Hz

**Safety:** CSA C22.2 No. 1010.1:1992

**EMC:** EN50082-1:1992 and EN55022:1994 Class B

**Power:** 9 V battery ANSI/NEDA 1604A or IEC 6LR619V alkaline; two batteries in 718

**Warranty:** Three-years

Functional Specifications:	Fluke 705 and 707	Fluke 715
<b>Voltage measurement</b>		
Range	0 V to 28 V	0 mV to 200 mV / 0 V to 25 V
Resolution	1 mV	10 µV / 1 mV
Accuracy	705: 0.025 % Rdg + 1 counts 707, 707Ex: 0.015 % Rdg + 2 counts	0.01 % Rdg + 2 counts
<b>Current measurement</b>		
Range	0 mA to 24 mA	0 mA to 24 mA
Resolution	0.001 mA	0.001 mA
Accuracy	705: 0.02 % Rdg + 2 counts 707, 707Ex: 0.015 % Rdg + 2 counts	0.01 % + 2 counts
<b>Current sourcing</b>		
Range	0 mA to 20 mA or 4 mA to 20 mA	0 mA to 20 mA or 4 mA to 20 mA
Accuracy	705: 0.02 % Rdg + 2 counts 707, 707Ex: 0.015 % Rdg + 2 counts	0.01 % Rdg + 2 counts
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 mV to 200 mV or 0 V to 20 V
Display current and % of span	Yes	mA or %
Auto step, auto ramp	Yes	Yes
Span Check	Yes	Yes
Battery life	18 hours typical, at 12 mA	18 hours typical, at 12 mA

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up and running.