

## 707 Loop Calibrator

Click here to calibrate



## Technical Data

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

This feature-rich solution combines the best features of a push-button and knob-base loop calibrator and offers:

- Large display and simple, quick-click interface for easy one-handed operation.
- Simultaneous mA and % readout for quick, easy, interpretation of readings.
- mA accuracy of 0.015%, superior to other loop calibrators in this price range.
- 1  $\mu$ A resolution for mA source, simulate and measure.
- 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 ramp to provide smooth outputs for valve slewing and loop functional tests.
- 24 volt internal loop supply, so you can power and read a transmitter at the same time without carrying a DMM.
- Measures V dc to 28 V.
- Single 9 V battery that is easily changed.
- 0-20 mA or 4-20 mA default start up modes.
- Innovative output adjustment dial with 1  $\mu$ A and 100  $\mu$ A resolution.
- HART™ mode connects 250  $\Omega$  resistor in series with 24 V loop for compatibility with HART communicators.

## Specifications

### Summary Specifications (18° to 28°C, one year)

Function	Range	Resolution	Accuracy
Voltage measure	0 to 28 V	.001 V	± (.015% Rdg + 2 counts)
mA measure	0 to 24 mA	.001 mA	.015% Rdg + 2 LSD
mA source <sup>1</sup>	0 to 24 mA	.001 mA	.015% Rdg + 2 LSD
mA simulate <sup>2</sup>	0 to 24 mA	.001 mA	.015% Rdg + 2 LSD
Loop supply	24 V dc	n/a	= 24 V

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

<sup>2</sup> Max applied voltage for simulation, 30 V

### Operating Modes

Measure current
Measure current/Loop power
Measure voltage
Simulate current; manual adjust; scroll up/down
Simulate current; 25% steps; 0 - 100% steps
Simulate current; Auto ramp (smooth/step)
Source current; manual adjust; scroll up/down
Source current; 25% steps; 0 - 100% steps
Source current; Auto ramp (smooth/step)

### General Specifications

Maximum voltage	30 volts
Non-operating temperature	-30 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/weight	152 mm L X 70 mm W x 41 mm D (224 g)
Size/weight with C10 Holster	164 mm L x 75 mm W x 47 mm D (350 g)
Battery	One 9 V alkaline
Battery life	18 hours typical, at 12 mA
Warranty	Three years

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## Ordering Information

Fluke-707 Loop Calibrator  
Each calibrator includes: TL75 Test Leads and AC70 Alligator Test Clips, C10 Holster, Instruction sheets (English, French, German, Spanish, Italian, Dutch, Norwegian, Danish, Swedish, Finnish, Portuguese, Korean, Chinese, Japanese), CE and CSA markings.

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