

## 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.

## 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.

Need Technical Assistance? Call:

**1-800-44 FLUKE**

Toll-free in the U.S. and Canada  
1-800-36-FLUKE in Canada  
(425) 446-5500 other countries

For more information to be sent to you by fax, call 1-800-FLUKE-FAX in the U.S. and Canada. Or, visit our web site at [www.fluke.com](http://www.fluke.com)

## Specifications

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

Function	Range	Resolution	Accuracy
Voltage measure	0 to 28 V	.001 V	± (.015% R <sub>dg</sub> + 2 counts)
mA measure	0 to 24 mA	.001 mA	.015% R <sub>dg</sub> + 2 LSD
mA source <sup>1</sup>	0 to 24 mA	.001 mA	.015% R <sub>dg</sub> + 2 LSD
mA simulate <sup>2</sup>	0 to 24 mA	.001 mA	.015% R <sub>dg</sub> + 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	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 C10 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

**Fluke.** Keeping your world  
up and running.

#### Fluke Corporation

PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.  
PO Box 1186, 5602 BD  
Eindhoven, The Netherlands

For more information call:  
In the U.S.A. (800) 443-5853 or  
Fax (425) 446-5116  
In Europe/M-East/Africa (31 40) 2 675 200 or  
Fax (31 40) 2 675 222  
In Canada (800) 36-FLUKE or  
Fax (905) 890-6866  
From other countries (425) 446-5500 or  
Fax (425) 446-5116  
Web access: <http://www.fluke.com/>

©2001 Fluke Corporation. All rights reserved.  
Printed in U.S.A. 8/2001 1627710 D-ENG-N Rev A