

705/707/715/787 Loop Calibrators

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

787 ProcessMeter

- DMM and loop calibrator in one tool
- Precision 1000V, 440 mA digital multimeter
- DC current source/loop calibrator
- Clear LCD with backlight; 4000 counts (30 000 counts for DC current)
- Externally accessible battery for easy battery changes
- 1000V overload protection on V, ohms, frequency
- Meets 1000 volt EN61010-1 CAT III standards
- Min/Max/Average/Hold/Relative modes

Specifications

Functions	705/707	715	787
Voltage measurement			
Range	0-28 V DC	0-100 mV, 0-10 V	0-1000 V AC or DC
Resolution	1 mV	10 µV 1 mV	0.1 mV to 1.0 V
Accuracy	0.025% Rdg + 1 LSD(705) 0.015% Rdg + 2 LSD(707)	0.02% Rdg + 2 LSD	0.1% Rgd + 1 LSD (VDC)
Current measurement			
Range	0-24 mA	0-24 mA	0-1 A 0-30 mA
Resolution	0.001 mA	0.001 mA	1 mA 0.001 mA
Accuracy	0.015% + 2 LSD (707)	0.015%	0.2%+2 LSD 0.05%+2 LSD
Current sourcing			
Range	0-20 mA or 4-20 mA ¹	0-20 mA or 4-20 mA ¹	0-20 mA or 4-20 mA ¹
Accuracy	0.015% Rdg + 2 LSD (707)	0.015% + 2 LSD	0.05% of span
Drive capability	1000 Ω @ 24 mA	1000 Ω @ 24 mA	500 Ω @ 24 mA
Loop power while measuring mA	24 V	24 V	N/A
Voltage sourcing	N/A	0-100 mV or 0-10 V	N/A
Resistance measurement	N/A	N/A	to 40 MΩ, 0.2% + 1 LSD
Frequency	N/A	N/A	to 19.999 kHz, 0.005% + 1 LSD
Diode test	N/A	N/A	2.4 V shows diode voltage drop
Continuity	N/A	N/A	Beeps for resistance <100 ohms
Display current and % of span	Yes	mA or %	Yes
Auto step, auto ramp	Yes	No	Yes
Span Check	Yes	No	No
Battery life	18 hours typical, at 12 mA	4-20 hours, typical, depending on functions used	50 hours typical, 12 hours sourcing 12 mA

¹ will over-range to 24 mA

Accessories and Ordering Information

Included Accessories

Fluke 705/707: C10 Protective Yellow Holster, TL75 Test Leads, AC70 Test Clips, Instruction Sheet (14 languages).

Fluke 715: C81Y Protective Yellow Holster with Flex-Stand, Test Leads and Alligator Clips, Single 9V alkaline battery, Instruction Sheet (14 languages).

Fluke 787: C81Y Protective Yellow Holster with Flex-Stand, TL75 Safety-Designed Test Lead Set plus AC70A Alligator Clips, one 9V alkaline battery, Users Manual.

Ordering Information

Fluke 705 Loop Calibrator

Fluke 707 Loop Calibrator

Fluke 715 Volt/mA Calibrator

Fluke 787 ProcessMeter