

TECHNICAL DATA

Fluke 787 ProcessMeter Digital Multimeter



Key features

- DMM and a loop calibrator in one rugged, handheld tool
- Provides a precision 1000 V, 440 mA True-RMS digital multimeter designed to meet 1000 volt IEC 1010 CAT III standards
- Features a clear LCD with backlight; 4,000 counts (30,000 counts for DC current)
- Performs frequency measurements to 20 kHz

Product overview: Fluke 787 ProcessMeter Digital Multimeter

Fluke 787 ProcessMeter doubles your capabilities but not your cost

The Fluke 787 ProcessMeter combines a DMM and a Loop Calibrator in one rugged, handheld tool, for about what you would expect to pay for a loop calibrator alone. It's a maintenance and calibration tool that will be at home in every instrumentation technician's tool box. Based on the trusted Fluke 87 DMM, the 787 adds the ability to measure, source, and simulate dc loop current with 1 microamp resolution and 0.05% accuracy. It puts a complete solution for troubleshooting and calibrating current loop applications in the palm of your hand so you can get more information, faster and easier.

So if you're tired of having to track down a calibrator, lugging around two tools, and switching back and forth, get the convenient solution for doubling your power. The 787 ProcessMeter from Fluke.

Other useful features:

- Provides Min/Max/Average/Hold/Relative modes, and diode test and continuity beeper
- Displays simultaneous mA and % of scale readout
- Provides 20 mA DC current source/loop calibrator/simulator
- Manual step (100%, 25%, Coarse, Fine) plus auto step and auto ramp
- Externally accessible battery for easy battery changes
- 1000 V overload protection on V, ohms, frequency
- 150 V overload protection on mA, backed up by 440 mA 1000V fuse

Want a built in 24-Volt loop supply and 250 Ω HART resistor? Consider the Fluke 789.

Specifications: Fluke 787 ProcessMeter Digital Multimeter

Specifications		
Current measurement	Range	0-1 A
	Resolution	1 mA
	Accuracy	0.2% + 2 LSD
	Range	0-30 mA
	Resolution	0.001 mA
	Accuracy	0.05% + 2 LSD
Current sourcing	Range	0-20 mA or 4-20 mA
	Resolution	0.05% of span
	Drive Capability	500 Ω @ 24 mA
Frequency	To 19.999 kHz, 0.005% + 1 LSD	
Continuity	Beeps for resistance < 100 ohms	
Voltage measurement	Range	0-1000 V AC or DC
	Resolution	0.1 mV to 1.0 V
	Accuracy	0.1% Rdg + 1 LSD (VDC)
Resistance measurement	To 40 MΩ, 0.2% + 1 LSD	
Diode test	2.4 V shows diode voltage drop	
Environmental Specifications		
Operating temperature	-20°C to 55°C	
Storage temperature	-40°C to 60°C	
Humidity (without condensation)	95% up to 30°C	
	75% up to 40°C	
	45% up to 50°C	
	35% up to 55°C	
Temperature coefficient	0.05 x (specified accuracy) per °C (for temperatures < 18°C or > 28°C)	

Safety Specifications

Electrical safety	Designed in accordance with IEC 1010-1, ANSI/ISA S82.01-1994 and CAN/CSA C22.2 No. 1010.1-92
Overvoltage category	IEC 1010-1 CAT III
Maximum voltage	1000 V rms

Mechanical and General Specifications

Size	32 x 87 x 187 mm
Weight	369 g
Baeries	Single 9 V Alkaline baery (ANSI/NEDA 1604A or IEC 6LR61)
Warranty	3 years
Baery life	50 hours typical (measurement), 12 hours typical (sourcing 12 mA)
Shock and vibration	Random, 2 g, 5-500 Hz
	1 meter drop test
Display current and % of span	Yes
Auto step, auto ramp	Yes

Ordering information



Fluke 787

Fluke 787 ProcessMeter™

Includes:

- AC70A Alligator Clips
- C81Y Protective Yellow Holster with Flex-Stand™
- One 9V Alkaline Battery
- Quick Reference Guide
- TL75 Safety-Designed Test lead Set



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

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.

For more information call:
In the U.S.A. (800) 443-5853
In Canada (800) 36-FLUKE
From other countries +1 (425) 446-5500
www.fluke.com

©2025 Fluke Corporation.
Specifications subject to change without notice.
05/2025

**Modification of this document is not permitted
without written permission from Fluke
Corporation.**