TECHNICAL DATA

Fluke 787B ProcessMeter™



Key features

- Compact digital multimeter and mA loop calibrator solution
- Measure/Source/Simulate loop currents while powering the loop
- Manual and automatic ramp up - ramp down functions
- Easy-to-read backlit display

Product overview: Fluke 787B ProcessMeter™

The Fluke 787B ProcessMeter™ doubles your troubleshooting capabilities by combining the power of a safety rated digital multimeter and mA loop calibrator into a single, compact test tool. Based on the trusted measurement capabilities of the Fluke 87V meter, the 787B adds the ability to measure, source and simulate mA with the accuracy and resolution you would expect from a Fluke mA loop calibrator, giving you the ideal tool for troubleshooting and calibrating current loop applications.

With Fluke Connect® mobile app and desktop software compatibility, technicians can wirelessly monitor, log, and share data from the field with their team anytime, from anywhere.* If you're looking for even more troubleshooting power, the Fluke 789 ProcessMeter™ offers technicians even more flexibility, and even includes a built-in 24 V loop power supply.

*Requires Fluke IR3000FC module (not included). Not all models are available in all countries. Check with your local Fluke representative.

Expand your troubleshooting capabilities

The Fluke 787B not only allows you to source, measure and simulate 20 mA DC current but also allows you simultaneously

look at mA and percent of scale readouts so you can easily compare readings to what you see on your controller. Manually step mA signals (100%, 25%, Coarse adjustment, Fine adjustment) or use the Auto step and Auto ramp feature to work even more efficiently.

Designed to meet 1000 V IEC 61010 CAT III and 600 V CAT IV standards, the Fluke 787B is also a full-featured, precision, true-rms digital multimeter with standard features for diode testing and a continuity beeper. Troubleshoot more, while carrying less. The 787B also allows you to make frequency measurements to 20 kHz and includes Min/Max/Average/Hold/Relative modes for easy operation. Even the batteries and fuses are easily accessible allowing you to make fast, easy changes.

Specifications: Fluke 787B ProcessMeter™

Measurement function	Range and resolution	Best accuracy (% of reading + LSD)	
V dc	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.1% + 1	
V ac (true-rms)	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.7% + 2	
mA dc	30.000 mA	.05% + 2	
A dc	1.000 A (0.440 A continuous)	0.2% + 2	
A ac	1.000 A (0.440 A continuous)	1% + 2	
Resistance	400.0 Ohms, 4.000 k, 40.00 k, 400.0 k, 4.0 M, 40 M	0.2% + 1	
Frequency (0.5 Hz to 20 kHz)	199.99 Hz, 1999.9 Hz, 19.999 kHz	.005% + 1	
Diode test	2.000 V (shows diode voltage drop)	2% + 1	
Continuity	Beeps for resistance < approx. 100 ohms		
Output function	Range and resolution	Drive capability	Accuracy (% of span)
DC current output (Internal battery operation)	0.000 to 20.000 mA or 4.000 to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	24 V compliance or, 1,200 ohms, @ 20 mA	0.05%
DC current simulate (Ext. 15 V to 48 V loop supply)	0.000 to 20.000 mA or 4.000 to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	1000 ohms, @ 20 mA	0.05%
Current adjustment modes	Manual: Coarse, Fine, 25% and 100% step		
	Automatic: Slow Ramp, Fast Ramp, 25% step		
Temperature range of 18 °C to 28 °C, for one year after calibration			
General specifications			
Maximum voltage applied between any jack and earth ground	1000 V RMS		
Storage temperature	-40 °C to 60 °C		
Operating temperature	-20 °C to 55 °C		

Temperature coefficient	0.05 x (specified accuracy) per °C (for temperatures < 18 °C or > 28 °C)
Relative humidity	95% up to 30 °C; 75% up to 40 °C; 45% up to 50 °C; 35% up to 55 °C
Vibration	Random, 2 g, 5-500 Hz
Shock	1 meter drop test
Safety	IEC61010-1, Pollution Degree 2/IEC61010-2-033, CAT IV 600 V/CAT III 1000 V
Size (HxWxL)	50 x 100 x 203 mm (1.97 x 3.94 x 8.00 in)
Weight	600 g (1.3 lbs)
Battery	Four AA alkaline batteries
Battery life	140 hours typical (measurement), 10 hours typical (sourcing 12 mA)
Warranty	Three years

Ordering information



Fluke 787B ProcessMeter™

Fluke 787B ProcessMeter™

Includes:

- TL71 Premium test lead set
- AC72 Alligator clips
- Four AA alkaline batteries (installed)
- Quick reference guide

Fluke-787B CAL

Fluke 787B ProcessMeter™, with a traceable certificate of calibration with data from Fluke

Includes:

- TL71 Premium test lead set
- AC72 Alligator clips
- Four AA alkaline batteries (installed)
- Quick reference guide
- A traceable certificate of calibration with data from Fluke



Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect™ system.

- Eliminate data-entry errors by saving measurements directly from the tool and associating them with the work order, report or asset record.
- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Access baseline, historical and current measurements by asset.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Share your measurement data using ShareLive™ video calls and emails.

Find out more at **flukeconnect.com**

Download on the App Store

ANDROID APP ON Google play



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Smart phone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.

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

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