

Fluke 789 ProcessMeter™

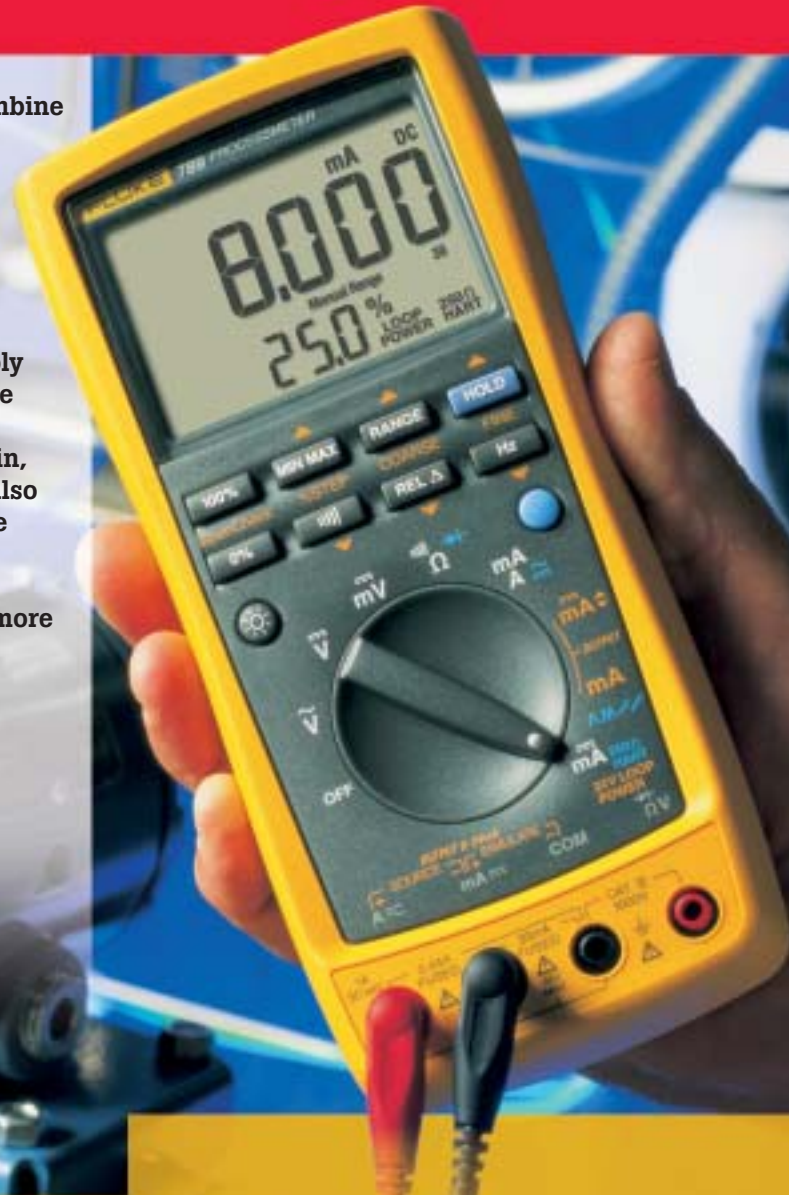
FLUKE®

Double Your Power

The Fluke 787 was the first tool to combine a DMM and a loop calibrator to give process technicians double the power in one tool. Now it's even better, the range is extended with the new Fluke 789 – the ultimate loop calibration multimeter.

The Fluke 789 has a 24-Volt loop supply reducing the need for taking a separate power supply when doing offline transmitter testing. And with its built-in, selectable 250-Ohm Hart® resistor, it also eliminates the need to carry a separate resistor with you.

Now process technicians can do a lot more while carrying a lot less.



New Features of the Fluke 789:

- 24 V Loop power supply
- Very large dual display
- Enhanced backlight with 2 brightness settings
- 1200 Ohm drive capability on mA source
- HART mode setting with loop power and a built-in 250 ohm resistor
- 0% and 100% buttons to toggle between 4 and 20 mA sourcing for a quick span check
- Externally accessible fuses for easy replacement
- Infrared serial I/O port compatible with FlukeView Forms (V2.1) software

These Fluke 789 features are also included in the Fluke 787:

- DMM designed to meet 1000 V EN61010-1 Cat III standards
- Precision 1000 V, 440 mA True-RMS digital Multimeter
- Frequency measurement to 20 kHz
- Min/Max/Average/Hold/Relative modes
- Diode Test and Continuity Beeper
- Simultaneous mA and % of scale readout
- 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



LISTED



Measurement Function	Range and Resolution	Best Accuracy (% of reading + LSD)
VDC	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.1% + 1
VAC (true RMS)	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.7% + 2
mADC	30.000 mA	0.05% + 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	0.005% + 1
Diode Test	2.400 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. 24 Volt 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%
24 V Loop Supply Current adjustment modes	Minimum 24 V Manual: Coarse, Fine, 25% and 100% step Automatic: Slow Ramp, Fast Ramp, 25% step	250 Ohms @ 20 mA	> 24 V

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: Designed in accordance with
EN61010, ANSI/ISA S82.01-1994 and
CAN/CSA C22.2 No. 1010.1-92

Over-voltage Category III

Size (HxWxD): 203 x 100 x 50 mm

Weight: 600 g

Battery: Four AA Alkaline battery

Battery Life: 50 hours typical
(measurement), 12 hours typical
(sourcing 12 mA)

Warranty: 3 years

Optional accessories

80T-IR Infrared Temperature Probe
80TK Thermocouple Module
80T-150U Universal Temperature Probe
TL20 / TL22 / TL24 / TL 26 / TL28 /
TL70A / TL40A Test Lead Sets
AC20 / AC80 Clips
TP20 Industrial Test Probes
80i-400 AC Current Clamp
i-410 AC/DC Current Clamp
i-1010 AC/DC Current Clamp
C125 Soft Meter Case
80K-6 and 80K-40 High Voltage Probes
PV350 Pressure Vacuum Module
Fiber Optic Meter FOM
LockPak
ToolPak

Distributed by:



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Ordering Information

Fluke 789 ProcessMeter

Included Accessories

TL71 Premium Test Lead Set plus
AC72 Alligator Clips
Four AA 9 V alkaline battery (installed)
Users Manual and Quick Reference Guide