

Features



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-port to process data in FlukeView Forms (V2.1) software



Specifications

| Specifications | |
|-------------------------------|--|
| Current Measurement | Range: 0-1 A AC or DC Resolution: 1 mA Accuracy: 0.2% + 2 LSD (DC) |
| | 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: 24 V Compliance or 1200 Ω @ 20 mA |
| Frequency | to 19.999 kHz, 0.005% + 1 LSD |
| Continuity | Beeps for resistance < 100 Ω |
| Voltage measurement | Range: 0-1000 V AC (true-rms) 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 | 2.0 V shows diode voltage drop |
| Display current and % of span | Yes |
| Auto step, auto ramp | Yes |

| 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 1000 V IEC 1010-1 CAT IV 600 V |
| Maximum voltage | 1000 V rms |

| Mechanical & General Specifications | |
|-------------------------------------|--|
| Size | 50 x 100 x 203 mm (1.25" H x 3.41"W x 7.35" L) |
| Weight | 610 g (1.6 lbs) |
| Batteries | 4 AA Alkaline batteries |
| Warranty | 3 years |
| Battery Life | 140 hours typical (measurement), 10 hours typical (sourcing 20 mA) |
| Shock & Vibration | Random, 2 g, 5-500 Hz 1 meter drop test |

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| Fluke 789 | ProcessMeter <ul style="list-style-type: none"> ● AC72 Alligator Clips ● Four AA 1.5 V alkaline battery (installed) ● TL71 Safety-Designed Test lead Set ● Users Manual and Quick Reference Guide |
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