

FLUKE®

Fluke 289

True-rms Industrial Logging Multimeter with TrendCapture

Technical Data

The Best Just Got Better.

The new 289 is the next generation high performance industrial logging multimeter designed to solve complex problems in electronics, plant automation, power distribution, and electro-mechanical equipment. With the ability to log data and review it graphically on-screen, you can solve problems faster and help minimize downtime. Let the new 289 be your watchdog for systems or processes while you are off solving other problems.

Equipped with new functionality

- **New** – TrendCapture quickly graphically displays logged data session to quickly determine whether anomalies may have occurred
- **New** – Zoom on trend provides unprecedented ability to view and analyze TrendCapture data; zoom in up to 14 times
- **New** – Selectable ac filter (Smoothing mode) helps display a steadier reading when the input signal is changing rapidly or noisy
- **New** – Adjustable recording and auto hold thresholds, specify a percentage change in the readings that begins a new event
- **New** – Large 50,000 count, 1/4 VGA dot matrix display with white backlight
- **New** – Logging function with expanded memory for unattended monitoring of signals over time. Using on-board TrendCapture users can graphically review logged readings without needing a PC. Store up to 15,000 recorded events.
- **New** – Save multiple logging sessions before pc download is necessary
- **New** – Two terminal 50 ohm range with 1 milliohm resolution, 10 mA source current. Useful for measuring and comparing differences in motor winding resistance or contact resistance.
- **New** – Low Pass filter for accurate voltage and frequency measurements at the same time on adjustable speed motor drives and other electrically noisy equipment
- **New** – LoZ Volts. Low impedance voltage function for eliminating ghost voltages. Also recommended when testing for absence or presence of live power.
- **New** – ⓘ button. On board help screens for measurement functions. Unsure about a function—go to that function and press the “i” button.
- Real time clock for automatic time stamping of saved readings
- Relative mode to remove test lead resistance from low ohms or capacitance measurements
- True-rms ac voltage and current for accurate measurements on non linear signals
- Measure up to 10 A (20 A for 30 seconds)
- 100 mF capacitance range
- Peak capture to record transients as fast as 250 μ s
- Optional magnetic hanger for easy setup and viewing while freeing your hands for other tasks
- Optically isolated communication port for transferring data to pc (usb cable and software optional)
- Limited lifetime warranty



TrendCapture displays vDC logged data.



Specifications

Function	Range and Resolution	Basic Accuracy
DC volts AC volts	50.000 mV, 500.00 mV, 5.0000 V, 50.000 V, 500.00 V, 1000.0 V	0.025 % 0.4 % (true-rms)
DC current AC current	500.00 µA, 5000.0 µA, 50.000 mA, 400.00 mA, 5.0000 A, 10.000 A	0.15 % 0.7 % (true-rms)
Temperature (excluding probe)	-200.0 °C to 1350.0 °C (-328.0 °F to 2462.0 °F)	1.0 %
Resistance	50.000 Ω, 500.00 Ω, 5.0000 kΩ, 50.000 kΩ, 500.00 kΩ, 5.0000 MΩ, 50.00 MΩ, 500.0 MΩ	0.05 %
Capacitance	1.000 nF, 10.00 nF, 100.0 nF, 1.000 µF, 10.00 µF, 100.0 µF, 1000 µF, 10.00 mF, 100 mF	1.0 %
Frequency	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz	.005 %

Additional Functions/Features	Fluke 289
Multiple on screen displays	Yes
True-rms ac bandwidth	100 kHz
dBV/dBm	Yes
DC mV resolution	1 µV
Megohm range	up to 500 MΩ
Conductance	50.00 nS
Continuity beeper	Yes
Battery/fuse access	Battery/fuse
Elapse time clock	Yes
Time of day clock	Yes
Min-max-avg	Yes
Duty cycle	Yes
Pulse width	Yes
Isolated optical interface	Yes
Auto/touch hold	Yes
Reading memory	Yes
Log to PC	Yes
Interval/event logging	Yes
Logging memory	up to 15,000 readings

Ordering information

289 True-rms Industrial
Logging Multimeter
with TrendCapture

Optional accessories

FVF-SC2 FlukeView® Forms
Software with Cable
TLK289 Industrial Test Lead Set
i400 AC Current Clamp
i410 AC/DC Current Clamp
80BK Integrated DMM
Temperature Probe
TPAK Magnetic Hanging Kit
C280 Soft Case

General specifications

Maximum voltage between any terminal and earth ground:

1000 V

Battery type: 6 AA alkaline
batteries, NEDA 15A IEC LR6

Battery life: 100 hours minimum,
200 hours in logging mode

Temperature:

Operating: -20 °C to 55 °C

Storage: -40 °C to 60 °C

Relative humidity: 0 to 90 %
(0 to 37 °C), 0 to 65 % (37 °C to
45 °C), 0 to 45 % (45 °C to 55 °C)

Electromagnetic compatibility:
EMC EN61326-1

Vibration: Random vibration per
MIL-PRF-28800F Class 2

Shock: 1 meter drop per IEC/EN
61010-1 2nd Edition

Size (HxWxL): 22.2 cm x 10.2
cm x 6 cm (8.75 in x 4.03 in x
2.38 in)

Weight: 870.9 g (28 oz)

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up and running.®