

New Fluke 287

True-rms Electronics Logging Multimeter with TrendCapture

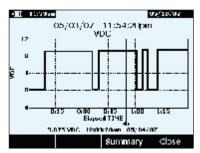
Technical Data

The advanced, logging digital multimeter with high accuracy and TrendCapture electronics professionals can depend on.

The Fluke 287 True-rms Electronics Logging Multimeter with TrendCapture quickly documents design performance and graphically displays what happened. Its unique logging and graphing capabilities mean you no longer need to download logged readings to a PC to detect a trend. The Fluke 287 packs more accuracy and convenience into a handheld multimeter than ever before.

Equipped with new functionality

 New – Large 50,000 count, 1/4 VGA display with white backlight. Multiple sets of measurement information can be simultaneously displayed at the same time.



 ${\it TrendCapture\ displays\ vDC\ logged\ date}.$

- New Logging function with TrendCapture. Useful for characterizing the performance of a design or for unattended monitoring while in the field. Users can review logged readings without needing a PC.
- New (i) button. On board help screens for measurement functions
- New Saved measurements allow you to name and recall measurements made in the field
- New Multi-lingual interface

- Multiple logging sessions possible without download
- 0.025 % basic dc accuracy
- 100 kHz ac bandwidth
- Real time clock for automatic time stamping of saved readings
- True-rms ac voltage and current for accurate measurements on complex signals or non linear loads. AC bandwidth specified to 100 kHz.
- Measure up to 10 A (20 A for 30 seconds)
- 100 mF capacitance range
- Temperature function
- Relative mode to remove test lead resistance from low ohms or capacitance measurements
- Peak capture to record transients as fast as 250 µs
- Premium test leads and alligator clips included
- Optional FlukeView forms enables you to document, store and analyze individual readings or a series of measurements, then convert them into professional-looking documents
- Optional magnetic hanger allows you to hang the meter for easy viewing while freeing your hands to focus on the job
- · Limited lifetime warranty





















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	500.00 Ω , 5.0000 k Ω , 50.000 k Ω , 500.00 k Ω , 5.0000 M Ω , 50.00 M Ω , 50.00 M Ω	0.05 %
Capacitance	1.000 nF,10.00 nF 100.0 nF, 1.000 μF, 10.00 μF, 100.0 μF, 100.0 μF, 1000 μF, 10.00 mF, 100.0 mF	1.0 %
Frequency	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz	0.005 %

Additional Functions/Features	Fluke 287	
Multiple on screen displays	Yes	
True-rms ac bandwidth	100 kHz	
dBV/dBm	Yes	
DC mV resolution	1 μV	
Megohm range	up to 500 M	
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	
Peak	250 μS	
Duty cycle	0.01 % to 99.99 %	
Pulse width	0.025 ms, 0.25 ms, 2.5 ms, 1250.0 ms	
Hold	Yes	
Isolated optical interface	Yes	
Auto/touch hold	Yes	
Reading memory	Yes	
Log to PC	Yes	
Interval/event logging	Yes	
Logging memory	up to 10,000 readings	

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 t 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)

Ordering information

287 True-rms Electronics Logging Multimeter

with TrendCapture

Optional accessories

FVF-SC2 FlukeView® Forms

Software with Cable Integrated DMM

80BK Integrated DMM
Temperature Probe
TLK287 Electronic Test Lead Set

TPAK Magnetic Hanging Kit

C280 Soft Case

Fluke. Keeping your world up and running.®

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New Fluke 289

True-rms Industrial Logging Multimeter with TrendCapture

Technical Data

New diagnostic functionality for maximizing productivity in the plant.

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 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 10,000 readings over time.
- 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 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.



TrendCapture displays vAC logged data.

- New (1) button. On board help screens for measure ment 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 µs
- Withstands hazardous 8,000 volt spikes caused by load switching and faults on industrial circuits and complies with second edition IEC and ANSI electrical safety standards.
- 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



Specifications

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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 $k\Omega$, 50.000 $k\Omega$, 500.00 $k\Omega$, 500.00 $k\Omega$, 500.00 $M\Omega$	0.05 %
Capacitance	1.000 nF,10.00 nF 100.0 nF, 1.000 μF, 10.00 μF, 100.0 μF, 100.0 μF, 1000 μF, 10.00 mF, 100.0 mF	1.0 %
Frequency	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz	.005 %

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Software with Cable

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i410 AC/DC Current Clamp
80BK Integrated DMM
Temperature Probe

TPAK Magnetic Hanging Kit
C280 Soft Case

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