

**Technical Data** 

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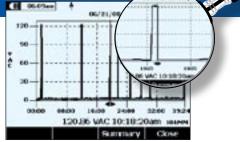
### New Fluke 287 True-rms Electronics Logging Multimeter with TrendCapture

### The Best Just Got Better.

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** 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 display with white backlight. Multiple sets of measurement information can be simultaneously displayed at the same time.
- 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.



TrendCapture displays vDC logged date.

- **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

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• Premium test leads and alligator clips included

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- 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 kΩ, 50.000 kΩ, 500.00 kΩ, 5.0000 MΩ, 50.00 MΩ, 50.00 MΩ, 50.00 MΩ, 50.00 MΩ	0.05 %
Capacitance	1.000 nF,10.00 nF 100.0 nF, 1.000 μF, 10.00 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, 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	

Order inform	ring nation
287	True-rms Electronics Logging Multimeter with TrendCapture
Optional	l accessories
FVF-SC2	FlukeView <sup>®</sup> Forms
	Software with Cable
80BK	Integrated DMM
	Temperature Probe
TLK287	Electronic Test Lead Set
TPAK	Magnetic Hanging Kit
C280	Soft Case

Fluke. Keeping your world up and running.®

Fluke Corporation

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## 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)



# New Fluke 289 True-rms Industrial Logging

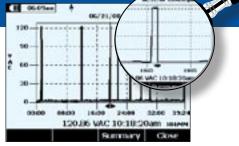
Multimeter with TrendCapture

#### 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



TrendCapture displays vDC logged date.

- 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 (i) 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

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- 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
- 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

### **Technical Data**

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#### **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, 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, 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, 999.99 kHz	.005 %

<b>Additional Functions/Features</b>	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 M $\Omega$
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	

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