

# FLUKE®

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

### Technical Data

#### 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

- TrendCapture quickly graphically displays logged data session to quickly determine whether anomalies may have occurred
- Zoom on trend provides unprecedented ability to view and analyze TrendCapture data; zoom in up to 14 times
- Selectable ac filter (Smoothing mode) helps display a steadier reading when the input signal is changing rapidly or noisy
- Adjustable recording and auto hold thresholds, specify a percentage change in the readings that begins a new event
- Large 50,000 count, 1/4 VGA display with white backlight. Multiple sets of measurement information can be simultaneously displayed at the same time.
- Logging function with expanded memory for uninterrupted 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.
- **i** button. On board help screens for measurement functions
- Saved measurements allow you to name and recall measurements made in the field
- 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  $\mu$ s
- 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



TrendCapture displays vDC logged date.



## 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, 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	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 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 (HxWxD):** 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  
80BK Integrated DMM Temperature Probe  
TLK287 Electronic Test Lead Set  
TPAK Magnetic Hanging Kit  
C280 Soft Case

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