

# Fluke 287

## True-rms Electronics Logging Multimeter with TrendCapture

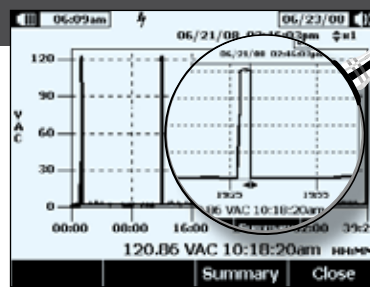
### Technical Data

### Now compatible with Fluke Connect™ Mobile App

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** – For wireless connectivity to smart devices, the 280 Series is compatible with the Fluke IR 3000 FC Infrared Connector allowing you to share live measurements on your iOS or Android™ device with the Fluke Connect mobile app.
- Requires Fluke IR 3000 FC Infrared connector for Fluke Connect communication
- 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.



TrendCapture displays VAC logged data.



Built with  
**FLUKE  
CONNECT™**

**See it. Save it. Share it.**  
**All the facts, right in the field.**

Fluke Connect with ShareLive™ video call is the only wireless measurement system that lets you stay in contact with your entire team without leaving the field. The Fluke Connect mobile app is available for Android™ (4.3 and up) and iOS (4x and later) and works with over 20 different Fluke products—the largest suite of connected test tools in the world. And more are on the way. Go to the Fluke website to find out more.

Make the best decisions faster than ever before by viewing all temperature, mechanical, electrical and vibration measurements for each equipment asset in one place. Get started saving time and increasing your productivity.

**Download the app at:**



Smart phone not included with purchase.



- 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.
- ⓘ 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
- Amp jack plugs 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

| Additional functions/features | Fluke 287                            |
|-------------------------------|--------------------------------------|
| Multiple on screen displays   | Yes                                  |
| True-rms ac bandwidth         | 100 kHz                              |
| dBV/dBm                       | Yes                                  |
| DC mV resolution              | 1 $\mu$ V                            |
| 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                                  |
| Peak                          | 250 $\mu$ S                          |
| 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                |

## Specifications

| Function                      | Range and Resolution                                                                                                                  | Basic Accuracy   |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------|
| DC volts                      | 50.000 mV, 500.00 mV, 5.0000 V, 50.000 V,                                                                                             | 0.025 %          |
| AC volts                      | 500.00 V, 1000.0 V                                                                                                                    | 0.4 % (true-rms) |
| DC current                    | 500.00 $\mu$ A, 5000.0 $\mu$ A, 50.000 mA, 400.00 mA,                                                                                 | 0.05 %           |
| AC current                    | 5.0000 A, 10.000 A                                                                                                                    | 0.6 % (true-rms) |
| Temperature (excluding probe) | -200.0 $^{\circ}$ C to 1350.0 $^{\circ}$ C (-328.0 $^{\circ}$ F to 2462.0 $^{\circ}$ F)                                               | 1.0 %            |
| Resistance                    | 500.00 $\Omega$ , 5.0000 k $\Omega$ , 50.000 k $\Omega$ , 500.00 k $\Omega$ , 5.0000 M $\Omega$ , 50.00 M $\Omega$ , 500.0 M $\Omega$ | 0.05 %           |
| Capacitance                   | 1.000 nF, 10.00 nF, 100.0 nF, 1.000 $\mu$ F, 10.00 $\mu$ F, 100.0 $\mu$ F, 1000 $\mu$ F, 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 %          |
| Connectivity                  | Optional infrared connector via Fluke ir3000 FC                                                                                       |                  |

| <b>General specifications</b>                         |                                                                                   |
|-------------------------------------------------------|-----------------------------------------------------------------------------------|
| Maximum voltage between any terminal and earth ground | 1000 V                                                                            |
| Battery type                                          | 6 AA alkaline batteries, NEDA 15A IECLR6                                          |
| 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),<br>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 3rd 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)                                                                   |
| RF connection time (binding time)                     | May take up to 1 minute                                                           |

## Ordering information

**287 True-rms Electronics Logging Multimeter with TrendCapture**

### Optional accessories

**FVF-SC2** FlukeView® Forms Software with Cable

**IR3000FC** Fluke Connect Infrared Connector

**80BK** Integrated DMM Temperature Probe

**TLK287** Electronic Test Lead Set

**TPAK** Magnetic Hanging Kit

**C280** Soft Case

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