

FLUKE®

New Fluke 289 True-rms Industrial Logging Multimeter with TrendCapture

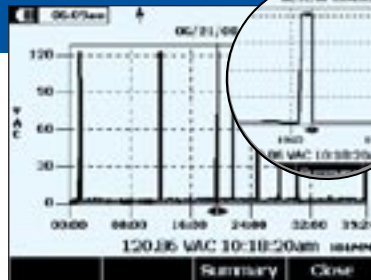
Technical Data

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** – **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
- 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 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 | 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 |

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)

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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 Printed in U.S.A. 7/2008 3032823 D-EN-N Rev B

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