

# Fluke 289

## True-rms Industrial Logging Multimeter with TrendCapture

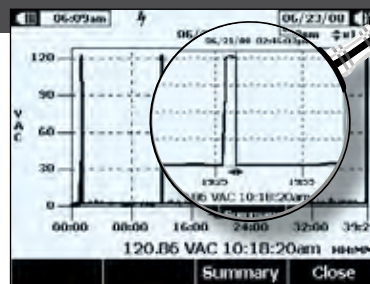
### Technical Data

### Now compatible with Fluke Connect™ Mobile App

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** – For wireless connectivity to smart devices, the 280 Series is compatible with the Fluke ir3000 FC Infrared Connector allowing you to share live measurements on your iOS or Android™ device with the Fluke Connect mobile app
- Requires Fluke ir3000 FC Infrared Connector for Fluke Connect communication
- TrendCapture 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 dot matrix display with white backlight
- Logging function with expanded memory for unattended monitoring of signals over



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 (4s 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.



time. Using on-board TrendCapture users can graphically review logged readings without needing a PC. Store up to 15,000 recorded events.

- Save multiple logging sessions before pc download is necessary
- 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.
- Low Pass filter for accurate voltage and frequency measurements at the same time on adjustable speed motor drives and other electrically noisy equipment
- LoZ Volts. Low impedance voltage function for eliminating ghost voltages. Also recommended when testing for absence or presence of live power.
- ⓘ 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  $\mu$ s
- Premium test leads and alligator clips included
- Amp jack plugs included
- Optional magnetic hanger for easy setup and viewing while freeing your hands for other tasks
- Optional FlukeView forms enables you to document, store and analyze individual readings or a series of measurements, then convert them into professional-looking documents
- Limited lifetime warranty

| Additional functions/features | Fluke 289             |
|-------------------------------|-----------------------|
| 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                   |
| 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 |

## 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                                                                                       |                  |

| General specifications                                |                                                                                   |
|-------------------------------------------------------|-----------------------------------------------------------------------------------|
| 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

**289** True-rms Industrial Logging Multimeter with TrendCapture

### Optional accessories

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

**IR3000FC** Fluke Connect Infrared Connector

**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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