

# Fluke 289 True-rms Industrial Logging Multimeter with TrendCapture

## **Technical Data**

### Now compatible with Fluke Connect<sup>™</sup> 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<sup>™</sup> 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



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

Fluke Connect with ShareLive<sup>™</sup> 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<sup>™</sup> (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.





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.
- (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 µs
- 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

### **Specifications**

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 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

Function	Range and Resolution	<b>Basic Accuracy</b>
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 μA, 5000.0 μA, 50.000 mA, 400.00 mA,	0.05 %
AC current	5.0000 Å, 10.000 Å	0.6 % (true-rms)
Temperature	-200.0 °C to 1350.0 °C (-328.0 °F to 2462.0 °F)	1.0 %
(excluding probe)		
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 %
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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 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 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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# **Fluke Connect**

Part Number	Kit Contents
Fluke-789/IR3000FC	Fluke 789 ProcessMeter, IR3000FC Connector, AC175 Alligator Clips, 4x AA Alkaline Batteries and TL71 Test Lead Set.
Fluke-289/IR3000FC	Fluke 289 DMM, IR3000FC Connector
Fluke-287/IR3000FC	Fluke 287 DMM, IR3000FC Connector

For full specification see datasheet above

**Contact Information:** 

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