

TECHNICAL DATA

Fluke 289 True-rms Industrial Logging Multimeter with TrendCapture



N10140

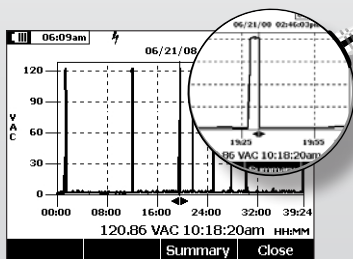


Fluke's most powerful handheld DMM

The 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 289 be your watchdog for systems or processes while you are off solving other problems.

Equipped with high-performance 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 dot matrix display with white backlight
- 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.
- 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 μ s



SAFETY RATING

CAT III 1000 V, CAT IV 600 V

WARRANTY

Limited lifetime

Specifications

General specifications		
Maximum voltage (between any terminal and earth ground)	1,000 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 °C 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)	
Detailed specifications		
Function	Range and resolution	Best 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 %

Specifications continued

Additional features	
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

Ordering information

289 True-rms Industrial Logging Multimeter with TrendCapture

Fluke-289/IMSK Industrial Multimeter Service Kit

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

Fluke. *Keeping your world
up and running.*®

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.

Fluke Europe B.V.
PO Box 1186, 5602 BD
Eindhoven, The Netherlands

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For more information call:

In the U.S.A. (800) 443-5853 or
Fax (425) 446-5116
In Europe/M-East/Africa +31 (0)40 267 5100 or
Fax +31 (0)40 267 5222
In Canada (800)-36-FLUKE or
Fax (905) 890-6866
From other countries +1 (425) 446-5500 or
Fax +1 (425) 446-5116
Web access: <http://www.fluke.com>

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Printed in U.S.A. 9/2019 3032823c-en