

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

FLUKE

Fluke 179/EFSP-NIST True RMS Digital Multimeter with built-in thermometer

The Fluke 179/EFSP-NIST is a versatile True RMS digital multimeter with a built-in thermometer for electrical troubleshooting and HVAC applications. It measures AC/DC voltage and current, resistance, capacitance, frequency, and temperature. Features include a large digital display, analog bar graph, auto/manual ranging, and Min/Max/Average recording.



MODEL

Fluke 179/EFSP-NIST

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

179/EFSP-NIST

LISTING

<https://aumictechlabs.com/products/179-efsp-nist-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Fluke 179/EFSP-NIST is a True RMS digital multimeter purpose-built for electrical troubleshooting and HVAC diagnostics. It delivers precise AC/DC voltage and current measurements alongside frequency, capacitance, resistance, continuity, and diode testing. A built-in thermometer eliminates the need for separate temperature instrumentation, enabling simultaneous thermal and electrical data capture in field and laboratory environments. Technical Specifications Display & Data Acquisition 6000-count digital display with backlight Analog bar graph for real-time signal visualization Min/Max/Average recording functions Manual and automatic ranging modes Closed-case calibration via front panel Voltage Measurements DC: 600.0 mV to 1000 V, $\pm(0.09\% + 2 \text{ counts})$, 0.1 mV resolution AC: 600.0 mV to 1000 V, $\pm(0.09\% + 2$

counts), 0.1 mV resolution, 2 Hz to 100 kHz Current Measurements DC: 60.00 mA, 400.0 mA, 6.000 A, 10.00 A ranges, $\pm(1.0\% + 3 \text{ counts})$, 0.01 mA resolution AC: 60.00 mA, 400.0 mA, 6.000 A, 10.00 A ranges, $\pm(1.0\% + 3 \text{ counts})$, 0.01 mA resolution, 2 Hz to 30 kHz Continuous rating: 10 A; 20 A capable for up to 30 seconds Impedance & Passive Component Testing Resistance: 600.0 Ω to 50 M Ω , $\pm(0.9\% + 1 \text{ count})$, 0.1 Ω resolution Capacitance: 1 nF to 10,000 μF , $\pm(0.9\% \text{ of reading})$, 2 counts Continuity and diode test included Key Features CAT III 1000 V and CAT IV 600 V input protection Transient impulse withstand: >8000 V for arc blast protection Integrated temperature measurement eliminates accessory dependency NIST-traceable calibration certificate with full data and measurement uncertainties Typical Applications Electrical system diagnostics, HVAC commissioning and troubleshooting, preventive maintenance on control circuits, field verification of transducers and sensors, laboratory measurement validation. Compatibility & Integration Suitable for systems integrators, field service engineers, and laboratory professionals requiring CAT III/IV-rated instruments with integrated thermal measurement and traceable calibration documentation.

Features & description

From manufacturer datasheet

Built-in temperature measurement with Type-K probe support

Backlit display Auto/manual ranging with Display Hold and Auto Hold Min/Max-Average recording and analog bar graph Technical Specifications Display Counts: 6000 True RMS Readings: AC Basic DC Accuracy: 0.09 percent DC Voltage Accuracy Best: plus or minus (0.09 percent plus 2) DC mV Range: 600.0 mV at 0.1 mV DC Voltage Ranges: 6.000 V, 60.00 V, 600.0 V, 1000 V DC Voltage Accuracy 1000 V Range: 0.15 percent plus 2 AC Voltage Accuracy 45 Hz to 500 Hz: 1.0 percent plus 3 AC Voltage Accuracy 500 Hz to 1 kHz: 2.0 percent plus 3 AC Voltage Maximum: 1000 V DC Current Maximum: 10 A AC Current Maximum: 10 A Resistance Maximum: 50 Mohm Resistance Accuracy Mid Ranges: 0.9 percent plus 1 Capacitance Maximum: 10000 uF Capacitance Accuracy Class: 1.2 percent plus 2 Frequency Maximum: 100 kHz Frequency Accuracy Class: 0.1 percent plus 1 Temperature Capability: Yes Type-K Operating Temperature: -10 C to +50 C Humidity 0 C to 35 C: 0 percent to 90 percent non-condensing Overvoltage Category: 1000 V CAT III, 600 V CAT IV Size: 43 × 90 × 185 mm Weight: 420 g Battery Life Alkaline Typical: about 200 hours without backlight continuous use class Notes Model column from Fluke 170 Series datasheet and 175/177/179 users manual. Temperature accuracy excludes probe error per OEM notes.

179EFSPNIST Characteristics / Specifications

PARAMETER	VALUE
Display Counts	6000
True RMS Readings	AC
Basic DC Accuracy	0.09 percent
DC Voltage Accuracy Best	plus or minus (0.09 percent plus 2)
DC mV Range	600.0 mV at 0.1 mV
DC Voltage Ranges	6.000 V, 60.00 V, 600.0 V, 1000 V
DC Voltage Accuracy 1000 V Range	0.15 percent plus 2
AC Voltage Accuracy 45 Hz to 500 Hz	1.0 percent plus 3
AC Voltage Accuracy 500 Hz to 1 kHz	2.0 percent plus 3
AC Voltage Maximum	1000 V
DC Current Maximum	10 A
AC Current Maximum	10 A
Resistance Maximum	50 Mohm
Resistance Accuracy Mid Ranges	0.9 percent plus 1
Capacitance Maximum	10000 uF
Capacitance Accuracy Class	1.2 percent plus 2
Frequency Maximum	100 kHz
Frequency Accuracy Class	0.1 percent plus 1
Temperature Capability	Yes Type-K
Operating Temperature	-10 C to +50 C
Humidity 0 C to 35 C	0 percent to 90 percent non-condensing
Overvoltage Category	1000 V CAT III, 600 V CAT IV
Size	43 × 90 × 185 mm
Weight	420 g
Battery Life Alkaline Typical	about 200 hours without backlight continuous use class

PARAMETER	VALUE
Humidity	0 C to 35 C: 0 percent to 90 percent non-condensing

179EFSPNIST Specifications

PARAMETER	VALUE
Auto/manual ranging with Display Hold and Auto Hold	Min/Max-Average recording and analog bar graph
Technical Specifications	Display Counts: 6000
Notes	Model column from Fluke 170 Series datasheet and 175/177/179 users manual. Temperature accuracy excludes probe error per OEM notes.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	10 C to +50 C
Operating Temperature	10 C to +50 C
Humidity	0 C to 35 C: 0 percent to 90 percent non-condensing
Humidity 0 C to 35 C	0 percent to 90 percent non-condensing
Overvoltage Category	1000 V CAT III, 600 V CAT IV
Size	43 × 90 × 185 mm
Weight	420 g
Battery Life Alkaline Typical	about 200 hours without backlight continuous use class Notes Model column from Fluke 170 Series datasheet and 175/177/179 users manual. Temperature accuracy excludes probe error per OEM notes.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Display Counts	6000
True RMS Readings	AC
Basic DC Accuracy	0.09 percent
DC Voltage Accuracy Best	plus or minus (0.09 percent plus 2)
DC mV Range	600.0 mV at 0.1 mV
DC Voltage Ranges	6.000 V, 60.00 V, 600.0 V, 1000 V
DC Voltage Accuracy 1000 V Range	0.15 percent plus 2
AC Voltage Accuracy 45 Hz to 500 Hz: 1.0 percent plus 3	
AC Voltage Accuracy 500 Hz to 1 kHz: 2.0 percent plus 3	
Specifications	
PARAMETER	VALUE
AC Voltage Maximum	1000 V
DC Current Maximum	10 A
AC Current Maximum	10 A
Resistance Maximum	50 Mohm
Resistance Accuracy Mid Ranges	0.9 percent plus 1
Capacitance Maximum	10000 uF
Capacitance Accuracy Class	1.2 percent plus 2
Frequency Maximum	100 kHz
Frequency Accuracy Class	0.1 percent plus 1
Temperature Capability	Yes Type-K
Operating Temperature	-10 C to +50 C
Humidity 0 C to 35 C	0 percent to 90 percent non-condensing
Overvoltage Category	1000 V CAT III, 600 V CAT IV
Size	43 x 90 x 185 mm
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PARAMETER	VALUE
Battery Life Alkaline Typical	about 200 hours without backlight continuous use class

Notes
Model column from Fluke 170 Series datasheet and 175/177/179 users manual. Temperature accuracy excludes probe error per OEM notes.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.