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**Data Sheet**

August 14, 2026

FLUKE

## Fluke 175 True RMS Digital Multimeter

The Fluke 175 is the entry model of the Fluke 170 Series 6000-count true-RMS handheld multimeters. Shared series specifications cover voltage to 1000 V, current to 10 A, resistance to 50 M $\Omega$ , capacitance to 10000  $\mu$ F, and frequency to 100 kHz, with DC voltage best accuracy  $\pm$  (0.15% + 2) on the 175 versus  $\pm$ (0.09% + 2) on 177/179. Everyday industrial and commercial electrical measurements, continuity and diode checks, capacitance and frequency troubleshooting, and general field service where true-RMS AC is required without temperature or backlight extras of higher 170 models. Frequency Maximum Resolution Class: 0.01 Hz Overvoltage Category: 1000 V CAT III, 600 V CAT IV Battery Life Alkaline Typical: about 200 hours without backlight Values from Fluke 170 Series True-rms Digital Multimeters datasheet/users manual comparison of models 175/177/179. Prefer model-specific certificate for given unit; 175 lacks temperature and backlight features of the 179.



MODEL

**Fluke 175**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**175**

LISTING

<https://aumictechlabs.com/products/175-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

### This unit

The Fluke 175 is a True RMS digital multimeter engineered for field troubleshooting and bench measurement across industrial and electronic systems. It delivers accurate readings on sinusoidal and non-sinusoidal signals through True RMS AC measurement, spanning voltage, current, resistance, capacitance, frequency, continuity, and diode testing in a single instrument. Technical Specifications Voltage Measurement DC: 0.1 mV to 1000 V,  $\pm$ (0.15% + 2) accuracy AC (True RMS):

0.1 mV to 1000 V,  $\pm(1.0\% + 3)$  accuracy, 5% to 100% of range frequency response Crest factor:  $\leq 3$  at full scale to 500 V, linearly decreasing to  $\leq 1.5$  at 1000 V Current Measurement DC: 0.01 mA to 10.00 A (20.00 A overrange for 30 seconds),  $\pm(1.0\% + 3)$  accuracy AC (True RMS): 0.01 mA to 10.00 A (20.00 A overrange for 30 seconds),  $\pm(1.5\% + 3)$  accuracy Frequency response 5% to 100% of range; crest factor  $\leq 3$  at full scale to 500 V,  $\leq 1.5$  at 1000 V Resistance: 0.1  $\Omega$  to 50.00 M $\Omega$ ,  $\pm(0.9\% + 1)$  accuracy Capacitance: 1 nF to 9999  $\mu$ F, 1.2% accuracy up to 1000  $\mu$ F in the 9999  $\mu$ F range Frequency: 2 Hz to 50 kHz; 30 kHz specified in mA and A ranges. below 10 kHz in 600 mV AC, 60 mA AC, and 6 A AC ranges Continuity: Beeper guaranteed on 250  $\Omega$ ; detects opens or shorts  $\geq 250 \mu$ s Diode Test: 2.400 V range,  $< 1.5$  V DC test voltage Display: 6000-count digital display (4 updates/second) with 33-segment analog bargraph (40 updates/second) Key Features Manual and automatic ranging Display Hold and Auto Hold for stable reading capture Min/Max/Average recording over time Test Lead Alert - "LEAd" message when rotary switch moves to/from Amp positions Closed-case calibration through front panel Safety rating: CAT III 1000V, CAT IV 600V Typical Applications Maintenance and diagnostic work on industrial control systems, power distribution, HVAC systems, and general electronics requiring True RMS measurement on non-linear loads. Compatibility & Integration Standard banana jack inputs. Front-panel controls for all functions without external software or connectivity requirements.

## 175 Characteristics / Specifications

| PARAMETER                              | VALUE                             |
|----------------------------------------|-----------------------------------|
| Display Counts                         | 6000                              |
| True RMS Readings                      | AC                                |
| Basic DC Accuracy Class                | 0.15%                             |
| DC Voltage Accuracy Best               | $\pm(0.15\% + 2)$                 |
| DC mV Range                            | 600.0 mV                          |
| DC mV Resolution                       | 0.1 mV                            |
| DC Voltage Ranges                      | 6.000 V, 60.00 V, 600.0 V, 1000 V |
| DC Voltage Maximum                     | 1000 V                            |
| AC Voltage Maximum                     | 1000 V                            |
| AC Voltage Accuracy 45 Hz to 500 Hz    | 1.0% + 3                          |
| AC Voltage Accuracy 500 Hz to 1 kHz    | 2.0% + 3                          |
| DC Current Maximum                     | 10 A                              |
| AC Current Maximum                     | 10 A                              |
| AC Current Accuracy Class              | 1.5% + 3                          |
| Resistance Maximum                     | 50 M $\Omega$                     |
| Resistance Accuracy Typical Mid Ranges | 0.9% + 1                          |
| Capacitance Maximum                    | 10000 $\mu$ F                     |
| Capacitance Accuracy Class             | 1.2% + 2                          |
| Frequency Maximum                      | 100 kHz                           |
| Frequency Accuracy Class               | 0.1% + 1                          |
| Frequency Maximum Resolution Class     | 0.01 Hz                           |
| Operating Temperature                  | -10 C to +50 C                    |
| Storage Temperature                    | -30 C to +60 C                    |
| Overvoltage Category                   | 1000 V CAT III, 600 V CAT IV      |
| Size                                   | 43 × 90 × 185 mm                  |

| PARAMETER                     | VALUE                             |
|-------------------------------|-----------------------------------|
| Battery Life Alkaline Typical | about 200 hours without backlight |

# General Specifications & Supplementary Characteristics

| PARAMETER                     | VALUE                                                                                                                                                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage temperature           | 30 C to +60 C                                                                                                                                                                                                                                                           |
| Operating temperature         | 10 C to +50 C                                                                                                                                                                                                                                                           |
| Operating Temperature         | 10 C to +50 C                                                                                                                                                                                                                                                           |
| Overvoltage Category          | 1000 V CAT III, 600 V CAT IV                                                                                                                                                                                                                                            |
| Size                          | 43 × 90 × 185 mm                                                                                                                                                                                                                                                        |
| Battery Life Alkaline Typical | about 200 hours without backlight Notes Values from Fluke 170 Series True-rms Digital Multimeters datasheet/users manual comparison of models 175/177/179. Prefer model-specific certificate for a given unit; 175 lacks temperature and backlight features of the 179. |

# 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 cover voltage to 1000 V, current to 10 A, resistance to 50 MΩ, capacitance to 10000 uF, and frequency to 100 kHz, with DC voltage best accuracy  $\pm(0.15\% + 2)$  on the 175 versus  $\pm(0.09\% + 2)$  on 177/179.

Applications

Everyday industrial and commercial electrical measurements, continuity and diode checks, capacitance and frequency troubleshooting, and general field service where true-RMS AC is required without temperature or backlight extras of higher 170 models.

Key Features

True-RMS AC voltage and current

Auto/manual ranging with Display Hold and Auto Hold

Min/Max-Average recording

Analog bar graph with 6000-count digital display

Continuity and diode test

Technical Specifications

## Technical Specifications

| PARAMETER                | VALUE                             |
|--------------------------|-----------------------------------|
| Display Counts           | 6000                              |
| True RMS Readings        | AC                                |
| Basic DC Accuracy Class  | 0.15%                             |
| DC Voltage Accuracy Best | $\pm(0.15\% + 2)$                 |
| DC mV Range              | 600.0 mV                          |
| DC mV Resolution         | 0.1 mV                            |
| DC Voltage Ranges        | 6.000 V, 60.00 V, 600.0 V, 1000 V |
| DC Voltage Maximum       | 1000 V                            |
| AC Voltage Maximum       | 1000 V                            |

AC Voltage Accuracy 45 Hz to 500 Hz: 1.0% + 3

AC Voltage Accuracy 500 Hz to 1 kHz: 2.0% + 3

## Specifications

| PARAMETER                              | VALUE    |
|----------------------------------------|----------|
| DC Current Maximum                     | 10 A     |
| AC Current Maximum                     | 10 A     |
| AC Current Accuracy Class              | 1.5% + 3 |
| Resistance Maximum                     | 50 MΩ    |
| Resistance Accuracy Typical Mid Ranges | 0.9% + 1 |
| Capacitance Maximum                    | 10000 uF |

| PARAMETER                          | VALUE                             |
|------------------------------------|-----------------------------------|
| Capacitance Accuracy Class         | 1.2% + 2                          |
| Frequency Maximum                  | 100 kHz                           |
| Frequency Accuracy Class           | 0.1% + 1                          |
| Frequency Maximum Resolution Class | 0.01 Hz                           |
| Operating Temperature              | -10 C to +50 C                    |
| Storage Temperature                | -30 C to +60 C                    |
| Overvoltage Category               | 1000 V CAT III, 600 V CAT IV      |
| Size                               | 43 x 90 x 185 mm                  |
| Battery Life Alkaline Typical      | about 200 hours without backlight |

Notes  
Values from Fluke 170 Series True-rms Digital Multimeters datasheet/users manual comparison of models 175/177/179. Prefer model-specific certificate for a given unit; 175 lacks temperature and backlight features of the 179.

### Available from Aumictech

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

Request a quote: [sales@aumictech.com](mailto: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.