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Data Sheet
August 2, 2026

KEITHLEY

Keithley 175A Autoranging Multimeter

The 175A provides a 4½-digit autoranging digital multimeter designed for bench and portable DC, AC, resistance, and dB measurements with 0.03% basic DC voltage accuracy and a 10 A current range. The instrument supports autoranging on DCV, ACV, ohms, and dB functions with optional IEEE-488 interface and battery pack accessories. Bench and field DC and AC voltage measurement; current measurement to 10 A; resistance from milliohm to megohm ranges; TRMS AC measurements to 100 kHz class; dB readouts for relative measurements; automated test via optional GPIB (1753A option); battery-powered portable use with 1758 pack. AC Measurement: True RMS to 100 kHz class Optional IEEE-488: 1753A interface option Operate within rated voltage, current, and frequency limits on selected range. Allow instrument to stabilize at ambient temperature before precision DCV checks. Use appropriate probe and shunt ratings for 10 A current measurements. Confirm optional 1753A GPIB and 1758 battery pack are installed when required for automated or portable use. Autoranging may hunt on noisy or rapidly changing inputs–manual range lock may improve stability. Alias 175A.

MODEL **Keithley 175A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **175A**	LISTING **https://aumictechlabs.com/products/175a-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley 175A is a 4.5-digit autoranging digital multimeter engineered for precision DC and AC measurements across voltage, current, and resistance. Built for both benchtop and portable field use, it delivers True RMS AC readings, manual or automatic range selection, and a 100-point data

logger with Min/Max hold capability. The backlit LCD display and relative measurement functions make it practical for troubleshooting and verification tasks in manufacturing, service, and design environments.Technical Specifications Display & Interface 4.5-digit LCD, 0.5 inch character height Electroluminescent backlight for low-light operation Polarity, function, range, and status indicators DC Voltage Range: 10 µV to 1000 V Basic accuracy: 0.03% Input impedance: 11 MΩ (200 mV and 2 V ranges); 10 MΩ (20 V, 200 V, 1000 V ranges) Normal mode rejection: >60 dB at 50 Hz, 60 Hz ±0.15% Settling time: 1 second to within 1 count Maximum input: 1000 V DC or peak AC (300 V rms continuous; <10 seconds per minute for 200 mV and 2 V) True RMS AC Voltage Range: 10 µV to 750 V Bandwidth: 100 kHz typical; 300 kHz at 3 dB Crest factor: 3 Input impedance: 11 MΩ || <75 pF (200 mV, 2 V); 10 MΩ || <75 pF (20 V, 200 V, 1000 V) Settling time: 2 seconds to within 15 counts Temperature coefficient: ±(0.1 × applicable accuracy)/°C; ±(0.07% + 2)/°C for 50 Hz–10 kHz Maximum input: 750 V rms, 1000 V peak (300 V rms continuous; <10 seconds per minute for 200 mV) DC Current Range: 10 nA to 10 A Overload protection: 2 A fuse (250 V) on mA input; 20 A for 15 seconds (unfused) on 10 A input Burden voltage: 0.3 V (200 µA–20 mA, 10 A ranges); 0.8 V (2000 mA range) Settling time: 1 second to within 1 count (mA ranges); 2 seconds to within 15 counts (10 A range) True RMS AC Current Range: 10 nA to 2 A Overload protection: 2 A fuse (250 V) on mA input; 20 A for 15 seconds (unfused) on 10 A input Settling time: 2 seconds to within 15 counts Derating: 0.15% rdg./amp above 5 A for self-heating Resistance Range: 10 mΩ to 200 MΩ Basic accuracy: 0.05% + 2 counts (200 Ω range) Open-circuit voltage: +5 V Settling time: 2 seconds to within 1 count on range dB Mode Reference: 600 Ω Accuracy: ±(0.02 dB + 1 count) above -78 dBm Resolution: 0.01 dB above 5% of rangeKey Features Autoranging and manual range selection 100-point data logger with Min/Max hold Relative measurement function True RMS AC measurement for harmonically distorted waveformsTypical Applications Benchtop verification and component testing Field service and troubleshooting Process monitoring and quality assurance Audio and telecommunications measurementCompatibility & Integration Portable form factor supports both stationary lab use and mobile field deployment.

Features & description

From manufacturer datasheet

Features

• 4½-digit LCD display • 0.03% basic DC voltage accuracy • 10 A current measurement range • True RMS AC to 100 kHz class • Resistance range 10 mΩ to 200 MΩ • Autoranging DCV, ACV, ohms, and dB • Bench/portable form factor • Optional IEEE-488 interface (1753A) • Optional battery pack (1758)

175A Characteristics / Specifications

PARAMETER	VALUE
Model	175A
Manufacturer	Keithley
Instrument Type	Autoranging Digital Multimeter
Display	4½-digit LCD
Basic DC Voltage Accuracy	0.03%
Current Range	10 A maximum
AC Measurement	True RMS to 100 kHz class
Resistance Range	10 mΩ to 200 MΩ
Autorange Functions	DCV, ACV, ohms, dB
Alias	175A Standard Operating Conditions Operate within rated voltage, current, and frequency limits on selected range. Allow instrument to stabilize at ambient temperature before precision DCV checks. Use appropriate probe and shunt ratings for 10 A current measurements.

175A Specifications

PARAMETER	VALUE
Keithley 175A Autoranging Multimeter	Overview
Key Features	- 4½-digit LCD display
Technical Specifications	Model: 175A

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
Model	175A
Manufacturer	Keithley
Instrument Type	Autoranging Digital Multimeter
Display	4½-digit LCD
Basic DC Voltage Accuracy	0.03%
Current Range	10 A maximum
AC Measurement	True RMS to 100 kHz class
Resistance Range	10 mΩ to 200 MΩ
Autorange Functions	DCV, ACV, ohms, dB

Optional IEEE-488: 1753A interface option
Optional Battery Pack: 1758
Alias: 175A

Standard Operating Conditions
Operate within rated voltage, current, and frequency limits on selected range. Allow instrument to stabilize at ambient temperature before precision DCV checks. Use appropriate probe and shunt ratings for 10 A current measurements.

Operational Notes
Confirm optional 1753A GPIB and 1758 battery pack are installed when required for automated or portable use. Autoranging may hunt on noisy or rapidly changing inputs—manual range lock may improve stability. Alias 175A.

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

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