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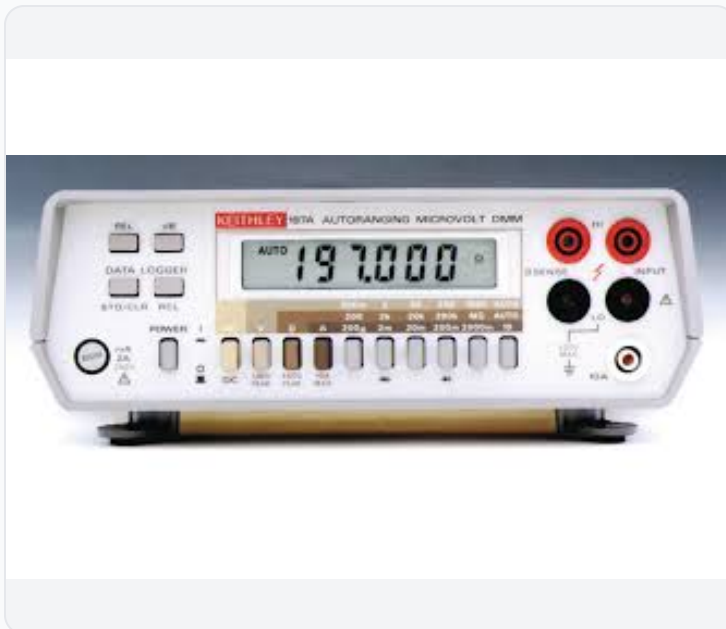
Data Sheet

August 13, 2026

KEITHLEY

Keithley 197A Autoranging Microvolt DMM

Keithley 197A Autoranging Microvolt Digital Multimeter 5.5 Digit The 197A is the production 5.5-digit (220000-count) autoranging microvolt DMM succeeding the Model 197. Sensitivity is 1 μ V, 1 nA, and 1 milliohm with 0.011% basic DCV accuracy. DCV spans 1 μ V to 1000 V with greater than 1 Gohm input resistance on the two lowest ranges. TRMS AC to 100 kHz, 2- and 4-wire ohms to 220 Mohm, and current to 10 A are specified. Optional GPIB (1972A/1973 class) and analog output appear on equipped units. Low-level DC voltage and resistance; portable 5.5-digit bench work; 10 A current ranges not found on later 3 A-class 2000; TRMS to 100 kHz; IEEE-488 systems when the GPIB option is installed. The 197A is the production 5.5-digit (220000-count) autoranging microvolt DMM succeeding the Model 197. Sensitivity is 1 μ V, 1 nA, and 1 milliohm with 0.011% basic DCV accuracy. DCV spans 1 μ V to 1000 V with greater than 1 Gohm input resistance on the two lowest ranges. TRMS AC to 100 kHz, 2- and 4-wire ohms to 220 Mohm, and current to 10 A are specified. Optional GPIB (1972A/1973 class) and analog output appear on equipped units. Low-level DC voltage and resistance; portable 5.5-digit bench work; 10 A current ranges not found on later 3 A-class 2000; TRMS to 100 kHz; IEEE-488 systems when the GPIB option is installed.



MODEL

Keithley 197A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

197A

LISTING

<https://aumictechlabs.com/products/197a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley 197A is a 5½-digit autoranging microvolt DMM delivering precision measurements across voltage, current, resistance, and specialized functions. With $\pm 220,000$ -count resolution and sensitivities to $1\mu\text{V}$, 1nA , and $1\text{m}\Omega$, it addresses demanding benchtop and field applications requiring high accuracy and stability. The backlit LCD display indicates polarity, function, range, and status, while autoranging capability (300ms average per range) and manual mode options provide measurement flexibility across nine distinct functions.

Technical Specifications

Display & Resolution $\pm 220,000$ -count backlit LCD, 0.45 inches high Resolution: $1\mu\text{V}$ to 10mV (voltage); 1nA to $100\mu\text{A}$ (current); $1\text{m}\Omega$ to $10\text{k}\Omega$ (resistance)

Voltage Measurement DC ranges: 200mV to 1000V ; AC ranges: 200mV to 750V DC accuracy: $0.011\% \pm 2$ counts (2V range, 1 year) AC accuracy (True RMS, 50Hz – 10kHz): $0.35\% + 100$ counts; $5\% + 400$ counts (50kHz – 100kHz , higher ranges) Input resistance: $>1\text{G}\Omega$ (200mV , 2V ranges); $11\text{M}\Omega$ to $10\text{M}\Omega$ (higher ranges) Maximum input: 1000V DC or peak AC 3dB bandwidth (AC): 300kHz typical

Current Measurement Ranges: 1nA to 10A DC/AC accuracy: $0.2\% + 15$ counts ($200\mu\text{A}$ – 200mA); $0.5\% + 15$ counts (10A) Overload protection: 2A fuse (250V), externally accessible

Resistance Measurement Ranges: $1\text{m}\Omega$ to $220\text{M}\Omega$ Automatic 2- or 4-terminal configuration Accuracy: $0.01\% + 2$ counts (200Ω range); $2.00\% + 1$ count ($200\text{M}\Omega$ range, 1 year, 22° – 24°C) Test current: 2mA nominal; open circuit voltage: $+5\text{V}$

Additional Functions True RMS AC measurement to 100kHz Diode test (junction voltage to 2.2V ; 1.6mA test current) dB mode with selectable impedance: 50 , 75 , 93 , 135 , 300 , 600 ohms Data logging: 100 -point storage, rates from $3/\text{second}$ to $1/\text{hour}$ Min/Max detection and storage Relative mode with pushbutton zeroing

Environmental Operating: 0° to 50°C ; $<80\%$ RH ($\leq 35^\circ\text{C}$); linearly derated $3\%/^\circ\text{C}$ (35° – 50°C) Storage: -40° to $+70^\circ\text{C}$ Warm-up: 1 hour to rated accuracy

Key Features

Autoranging (DC volts, AC volts, ohms) or manual mode Exceptional low-voltage sensitivity: $1\mu\text{V}$ resolution Nanoampere-level current measurement capability Selectable data logging with continuous min/max tracking High input impedance minimizes loading errors Portable design with optional battery pack for field deployment

Typical Applications Precision DC and AC measurement in R&D and manufacturing Sensor and transducer characterization Low-level signal detection in electronic circuits Temperature coefficient and drift analysis Resistance measurement from milliohm to megohm scales Diode junction voltage verification

Compatibility & Integration Manual and autoranging modes support diverse measurement workflows. Relative mode enables differential testing against reference baselines. The 100 -point logger accommodates process monitoring and trend analysis without external data acquisition hardware.

197A Characteristics / Specifications

PARAMETER	VALUE
Model	197A
Manufacturer	Keithley Instruments
Instrument Type	5.5 digit autoranging microvolt DMM
Alias	197A; 197
Resolution	5.5 digits, 220000 counts
Basic DCV accuracy	0.011%
DC voltage	200 mV to 1000 V full scale decade ranges
DC voltage LSD	1 uV to 10 mV
DC voltage span	1 uV to 1000 V (nine decades)
Input resistance low V	greater than 1 Gohm on the two lowest voltage ranges
DC current	200 uA to 10 A full scale decade ranges
DC current LSD	1 nA to 100 uA
DC current span	1 nA to 10 A (six ranges)
AC voltage	200 mV to 750 V TRMS decade ranges
AC current	200 uA to 10 A TRMS decade ranges
AC bandwidth	TRMS to 100 kHz
Resistance	200 ohm to 200 Mohm full scale decade ranges
Resistance LSD	1 milliohm to 10 kohm
Resistance span	1 milliohm to 220 Mohm two and four terminal
Diode test	2 kohm and 200 kohm ranges class
Ranging	autorange or manual
Display	LCD 220000 count
GPIB option	1972A (GPIB and analog output) or 1973 (GPIB) class
Predecessor	Model 197 (197A is the later manufactured version)
Not 1	197/197A drop the 20 mV/20 uA/20 ohm ranges of the 177 but addadigit

PARAMETER	VALUE
Form	portable bench DMM
Ship weight class	about 5 lb
Related	Keithley 199 / 196 language cousins used by later 2000 emulation Notes Specs from Keithley 197/197A microvolt DMM product literature and TekWiki Model 197 specification table. Confirm GPIB/analog option boards before quoting remote or recorder output. 10 A ranges require the correct current terminals and fuse.
Bandwidth	TRMS to 100 kHz

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	
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PARAMETER	VALUE
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Specifications

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AC bandwidth	TRMS to 100 kHz
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Resistance span	1 milliohm to 220 Mohm two and four terminal
Diode test	2 kohm and 200 kohm ranges class
Ranging	autorange or manual

Specifications

PARAMETER	VALUE
Display	LCD 220000 count
GPIB option	1972A (GPIB and analog output) or 1973 (GPIB) class
Predecessor	Model 197 (197A is the later manufactured version)

Specifications

PARAMETER	VALUE
Not 177	197/197A drop the 20 mV/20 uA/20 ohm ranges of the 177 but addadigit
Form	portable bench DMM
Ship weight class	about 5 lb

Related: Keithley 199 / 196 language cousins used by later 2000 emulation

Notes

Specs from Keithley 197/197A microvolt DMM product literature and TekWiki Model 197 specification table. Confirm GPIB/analog option boards before quoting remote or recorder output. 10 A ranges require the correct current terminals and fuse.

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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sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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30-day returns
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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.