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Data Sheet

August 13, 2026

KEITHLEY

Keithley 191

Keithley 191 5.5 Digit 200000 Count Bench Digital Multimeter The Keithley 191 is a 5.5-digit, 200000-count, manual-ranging bench DMM with DC volts and ohms standard. It reads 1 μ V to 1200 V DC on five ranges and 1 milliohm to 20 megohm on six ranges with automatic 2-wire or 4-wire ohms. Resolution is 0.0005 percent with 1 μ V / 1 milliohm sensitivity. Optional Model 1910 adds AC voltage from 10 μ V to 1000 V on four ranges and is field installable. A microprocessor combines single-slope and charge-balance conversion with automatic non-linear digital filtering. Pushbutton NULL bucks thermal EMFs and 2-wire lead resistance. Native current ranges are not provided; Model 1901 current adapter and other probes extend capability. The Keithley 191 is a 5.5-digit, 200000-count, manual-ranging bench DMM with DC volts and ohms standard. It reads 1 μ V to 1200 V DC on five ranges and 1 milliohm to 20 megohm on six ranges with automatic 2-wire or 4-wire ohms. Resolution is 0.0005 percent with 1 μ V / 1 milliohm sensitivity. Optional Model 1910 adds AC voltage from 10 μ V to 1000 V on four ranges and is field installable. A microprocessor combines single-slope and charge-balance conversion with automatic non-linear digital filtering. Pushbutton NULL bucks thermal EMFs and 2-wire lead resistance. Native current ranges are not provided; Model 1901 current adapter and other probes extend capability



MODEL

Keithley 191

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

191

LISTING

<https://aumictechlabs.com/products/191-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley 191 is a 5½-digit (200,000 counts) manual-ranging digital multimeter engineered for precise DC voltage and resistance measurements across laboratory and field applications. Built on a microprocessor-based architecture, it combines single-slope and charge-balance analog-to-digital conversion with automatic non-linear digital filtering to minimize noise and stabilize display response. The instrument delivers 1 µV DC resolution with 0.005% ±2 digits basic accuracy, and resistance measurement down to 1 mΩ across six ranges extending to 20 MΩ. A pushbutton null function corrects for lead resistance in 2-wire ohms and bucks thermal EMFs in low millivolt measurements.

Technical Specifications

Measurement Ranges & Resolution

DC Voltage: 1 µV to 1200 V across 5 ranges; 1 µV resolution; 0.005% ±2 digits accuracy

Resistance: 1 mΩ to 20 MΩ across 6 ranges; 1 mΩ resolution

AC Voltage (Model 1910 option): 10 µV to 1000 V across 4 ranges

Display & Conversion Speed

Six 0.5-inch LED digits with decimal point

DC Volts: 1 reading/second; Ohms: 3 readings/second; AC Volts: 2 readings/second

Settling time: <1.3 seconds to 0.005% of final reading for zero to full-scale step input

Electrical Characteristics

DC Voltage input impedance: 2 MΩ shunted by 80 dB DC, 50/60 Hz (1 kΩ in either lead)

NMRR: >60 dB at 50/60 Hz

Input LO to power line ground isolation: >1000 MΩ shunted by ~30 pF

Maximum input between LO and power line ground: 1400 V peak, 50/60 Hz

Power consumption: 25 VA maximum

Line power: 105-125 VAC or 210-250 VAC selectable; 50/60 Hz

Physical & Environmental Dimensions

95 mm H × 235 mm W × 257 mm D

Weight: 2.3 kg

Connectors: 5-way binding posts

Operating temperature: 0°C to 50°C; humidity 0-80% RH to 35°C

Warm-up time: 1 hour to rated accuracy

Key Features

Microprocessor-controlled measurement with automatic non-linear filtering

Null pushbutton with annunciator for zeroing and thermal EMF rejection

Programmable multimeter functionality

High CMRR and NMRR for noise-immune measurements

Typical Applications

Precision DC voltage and resistance characterization; thermal EMF compensation in low-level DC measurements; resistance verification across component and circuit-board testing.

Compatibility & Integration

Optional Model 1910 AC Voltage module; Model 1901 Plug-in Current Adapter for DC current measurements.

Features & description

From manufacturer datasheet

Features

- 0.5 inch 5.5-digit LED with range-selected decimal point • Pushbutton NULL for thermal EMF, 2-wire lead drop, and deviation from stored value • Automatic 2-wire / 4-wire ohms without a separate switch
- Error display minus 1EEEE for illegal range/function combinations • Automatic polarity (minus displayed, positive implied) • Field-installable 1910 AC option; 1901 current adapter; 1600, 1682, 1685, 1651 accessories

191 Characteristics / Specifications

PARAMETER	VALUE
Model	191
Manufacturer	Keithley Instruments
Instrument Type	5.5 digit manual ranging bench digital multimeter
Alias	191; Keithley 191
Display Digits	5.5
Display Counts	200000
Display Type	0.5 inch LED
Resolution Class	0.0005 percent
DC Voltage Span	1 uV to 1200 V on 5 ranges
DC Voltage Ranges	200 mV, 2 V, 20 V, 200 V, 1200 V
DC Voltage LSD	1 uV on 200 mV range
DC Overrange Counts	199999 (NULL off)
DC Max Input Low Ranges	700 V continuous; 1200 V for 1 minute (200 mV and 2 V)
DC Max Input High Ranges	1200 V continuous (20 V through 1200 V)
Resistance Span	1 milliohm to 20 megohm on 6 ranges
Resistance Ranges	200 ohm, 2 kohm, 20 kohm, 200 kohm, 2000 kohm, 20 Mohm
Resistance Wiring	automatic 2 terminal or 4 terminal
Ohms 200 ohm Source	about 4 mA short; 400 mV open; HI post negative
Ohms 2 kohm Source	about 4 mA short; 4 V open
Ohms 20 kohm Source	about 400 uA short; 4 V open
Ohms 200 kohm Source	about 40 uA short; 4 V open
Ohms 2 Mohm Source	about 4 uA short; 4 V open
Ohms Max Input	360 V peak, 250 V rms all ranges
AC Option Model	1910 field installable
AC Voltage Span	10 uV to 1000 V on 4 ranges (1910)

PARAMETER	VALUE
AC Voltage Ranges	2 V to 1000 V full scale decade ranges (1910)
AC Max Input	250 V rms, 360 V peak; 1000 V rms sine or DC; 2e7 V Hz
Warmup For Rated Accuracy	1 hour (usable immediately at 18 C to 28 C)
Line Voltage Standard	105 to 125 V or 210 to 250 V, 50 or 60 Hz
Line Voltage Optional	90 to 110 V special transformer
Power Consumption	25 VA
Accessory HV Probe	Model 1600, 1200 V to 40 kV DC
Accessory Current Adapter	Model 1901, 1 uA/digit to 2000 mA DC (AC with 1910)
Accessory RF Probe	Model 1682, 0.25 V to 30 V rms, 100 kHz to 100 MHz
Accessory Clamp Probe	Model 1685, 0 to 200 A rms AC (requires 1910)
Accessory Current Shunt	Model 1651, 0 to 50 A DC (10 A to 50 A rms AC with 1910)

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
Model	191
Manufacturer	Keithley Instruments
Instrument Type	5.5 digit manual ranging bench digital multimeter
Alias	191; Keithley 191
Display Digits	5.5
Display Counts	200000
Display Type	0.5 inch LED
Resolution Class	0.0005 percent
DC Voltage Span	1 uV to 1200 V on 5 ranges
DC Voltage Ranges	200 mV, 2 V, 20 V, 200 V, 1200 V
DC Voltage LSD	1 uV on 200 mV range
DC Overrange Counts	199999 (NULL off)
DC Max Input Low Ranges	700 V continuous; 1200 V for 1 minute (200 mV and 2 V)
DC Max Input High Ranges	1200 V continuous (20 V through 1200 V)
Resistance Span	1 milliohm to 20 megohm on 6 ranges
Resistance Ranges	200 ohm, 2 kohm, 20 kohm, 200 kohm, 2000 kohm, 20 Mohm
Resistance Wiring	automatic 2 terminal or 4 terminal
Ohms 200 ohm Source	about 4 mA short; 400 mV open; HI post negative
Ohms 2 kohm Source	about 4 mA short; 4 V open
Ohms 20 kohm Source	about 400 uA short; 4 V open
Ohms 200 kohm Source	about 40 uA short; 4 V open
Ohms 2 Mohm Source	about 4 uA short; 4 V open
Ohms Max Input	360 V peak, 250 V rms all ranges
AC Option Model	1910 field installable
AC Voltage Span	10 uV to 1000 V on 4 ranges (1910)
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Line Voltage Standard	105 to 125 V or 210 to 250 V, 50 or 60 Hz
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Accessory RF Probe	Model 1682, 0.25 V to 30 V rms, 100 kHz to 100 MHz
Accessory Clamp Probe	Model 1685, 0 to 200 A rms AC (requires 1910)
Accessory Current Shunt	Model 1651, 0 to 50 A DC (10 A to 50 A rms AC with 1910)

Notes

Specs from Keithley Model 191 Digital Multimeter Instruction Manual (30183A) and TekWiki Model 191 condensed table. Confirm 1910 AC option and whether 1901/1600/1682 accessories are present. No native current jacks on the 191 itself.

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.