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Data Sheet

August 6, 2026

KEITHLEY

Keithley 227 Current Source 1000uA to 1000mA Full Scale in 4 Ranges

Keithley 227 Current Source 1000uA to 1000mA Full Scale in 4 Ranges The Keithley 227 is a precision DC current source covering 1000 μ A (1 mA) to 1000 mA full scale in four ranges. Designed for component and materials testing requiring stable programmed current. Front-panel and systems use; confirm exact compliance voltage and accuracy from the unit manual/faceplate. Device current bias; resistance measurement setups; materials testing; general lab current source. The Keithley 227 is a precision DC current source covering 1000 μ A (1 mA) to 1000 mA full scale in four ranges. Designed for component and materials testing requiring stable programmed current. Front-panel and systems use; confirm exact compliance voltage and accuracy from the unit manual/faceplate. Device current bias; resistance measurement setups; materials testing; general lab current source.



MODEL

Keithley 227

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

227

LISTING

<https://aumictechlabs.com/products/227-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley 227 is a precision bipolar DC current source engineered for laboratory and industrial test applications requiring stable, accurate current output across four selectable ranges. It delivers 1 mA to 1000 mA full scale with exceptional load regulation of $\pm 0.005\%$ and adjustable compliance voltage up to 300 V (50 V on the 1000 mA range). Fine-resolution output control

combines a three-digit readout with continuously adjustable least significant digit selection, enabling setability of typically 0.005% of full range in a single rotation. The output floats up to 500 V above chassis ground with isolation exceeding 10^9 ohms and negligible current drift (less than 5 ppm per volt offset). Technical Specifications Current Ranges: 1 mA, 10 mA, 100 mA, 1000 mA (full scale) Compliance Voltage: Up to 300 V on 1 mA, 10 mA, and 100 mA ranges; up to 50 V on 1000 mA range; adjustable limit to 300 V maximum Load Regulation: $\pm 0.005\%$ of range (no load to full load) Output Float: 500 V above chassis ground; isolation $\sim 10^9$ ohms Output Stability: Less than 5 ppm per volt offset from ground Setability: Approximately 0.005% of full range per 1° rotation Operating Temperature: Up to 50°C ambient Key Features Bipolar DC output with continuously adjustable fine current control Output modulation capability Voltage programming input (standard) Optional Model 2271 Programming Option enables remote control of range, magnitude, polarity, and compliance via resistance programming or external power supply closure Automatic thermal shutdown on fan failure or abnormal heating Replaceable air filter (Keithley Part No. 25791); monthly cleaning recommended in laboratory environments Typical Applications Precision current sourcing for device characterization, component testing, and automated measurement systems requiring high compliance voltage and fine current resolution across multiple decades. Compatibility & Integration Voltage programming input standard. Remote programmability available via optional Model 2271 Programming Option for current and compliance resistance programming plus range and compliance maximum selection via external power supply integration.

Features & description

From manufacturer datasheet

Features

- Full-scale ranges: 1000 μ A, and three higher ranges through 1000 mA (4 ranges total per product identity)
- DC current source architecture
- Stable regulated output for resistive and device loads
- Confirm compliance voltage, resolution, and accuracy on Keithley 227 manual for the specific revision

227 Characteristics / Specifications

PARAMETER	VALUE
Model	227
Manufacturer	Keithley Instruments
Instrument Type	DC Current Source
Alias	227; Keithley 227 Current 1000 μ A to 1000 mA full scale in 4 ranges Operational Notes
Full-scale ranges	1000 μ A, and three higher ranges through 1000 mA (4 ranges total per product identity)

227 Specifications

PARAMETER	VALUE
Key Features	- Full-scale ranges: 1000 μ A, and three higher ranges through 1000 mA (4 ranges total per product identity)
Technical Specifications	Model: 227
Current	1000 μ A to 1000 mA full scale in 4 ranges
Operational Notes	Prefer Keithley 227 manual (1978-era literature). Catalog exact match: 227-2. Do not confuse with Agilent 6227B.

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	227
Manufacturer	Keithley Instruments
Instrument Type	DC Current Source
Alias	227; Keithley 227

Current

1000 μ A to 1000 mA full scale in 4 ranges

Operational Notes

Prefer Keithley 227 manual (1978-era literature). Catalog exact match: 227-2. Do not confuse with Agilent 6227B.

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.