

KEITHLEY

2400

The Keithley 2400 is a standard 20 W SourceMeter instrument that tightly couples a highly stable DC power source with a true instrument-grade 5½-digit multimeter. Operating as a compact, single-channel DC parametric tester, it functions as a voltage source, current source, voltage meter, current meter, and ohmmeter. With 4-quadrant operation, it is capable of sourcing and sinking power, making it ideal for testing components like diodes, resistors, active circuit protection devices, and portable battery-powered electronics.

SPECIFICATIONS

General

Interfaces	IEEE-488 (GPIB), RS-232, Keithley Trigger Link, Programmable Digital I/O
Display	Vacuum Fluorescent Display (VFD)
Warm-up Time	1 hour to rated accuracy
Calibration Interval	1 year
Maximum Common Mode Voltage	250 V DC

Physical

Operating Temperature	0 to 50 °C
Dimensions (W×H×D)	213 × 89 × 370 mm
Weight	3.21 kg
Cooling	Convection

System Specifications

Maximum Output Power	20 W
Quadrant Operation	4-quadrant (Source and sink)
Instrument Functions	Voltage Source, Current Source, Voltage Meter, Current Meter, Ohmmeter

Voltage Source Specifications

Voltage Source Ranges	±200 mV, ±2 V, ±20 V, ±200 V
Minimum Source Voltage Resolution	5 µV

Current Source Specifications

Current Source Ranges	±1 µA, ±10 µA, ±100 µA, ±1 mA, ±10 mA, ±100 mA, ±1 A
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Voltage Measurement Specifications

Voltage Measurement Ranges	±200 mV, ±2 V, ±20 V, ±200 V
Minimum Measurement Voltage Resolution	1 µV

Current Measurement Specifications

Current Measurement Ranges	±1 µA, ±10 µA, ±100 µA, ±1 mA, ±10 mA, ±100 mA, ±1 A
Minimum Measurement Current Resolution	10 pA

Measurement Specifications

Basic Measurement Accuracy	0.012%
Measurement Resolution	5½ digits

Resistance Measurement Specifications

Remote Sensing Capability	2-, 4-, and 6-wire configurations
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System Speeds and Timing

Maximum Reading Rate	1700 readings/second at 4½ digits (via GPIB)
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Math and Memory Capabilities

Pass/Fail Comparator	Built-in for fast sorting/binning
Data Buffer Size	5000 readings

Interfaces and Connectivity

Supported Software	Keithley LabTracer 2.0 I-V curve tracing software
Command Set	SCPI

Physical and Mechanical

Form Factor	Half-rack, 2U high
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Environmental and Compliance

Storage Temperature	-25 °C to 65 °C
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Measurement

Input Impedance	> 10 GΩ (Voltage Measurement)
Common Mode Rejection Ratio (CMRR)	> 120 dB (at DC, 50/60 Hz)
Normal Mode Rejection Ratio (NMRR)	> 60 dB (at 50/60 Hz)

Instrument Functions

Sweep Types	Linear, Logarithmic, Custom, Source-Memory
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Connectivity

Trigger Link	8-pin Micro-DIN
Digital I/O	DB-9 female (Component Handler Interface)

Power

Line Frequency	50 Hz to 60 Hz
Power Consumption	210 VA maximum

Performance

Overrange	105% of range, source and measure
Source Delay	0 to 9999.999 seconds
Compliance Limits	Bipolar, user-programmable voltage or current limit

Compliance

Safety Compliance	EN 61010-1
EMC Compliance	EN 61326-1

Environmental

Maximum Operating Altitude	2000 m
Pollution Degree	2
Operating Environment	Indoor use only

TECHNOLOGY

Source Measure Unit (SMU)

APPLICATIONS

DC parametric testing, IDDQ testing, battery-powered device testing, component testing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.