

KEITHLEY

2750

The Keithley 2750 is a highly flexible 6.5-digit multimeter and data acquisition system within the Integra Series. It features five expansion slots accommodating up to 200 multiplexed channels, built-in signal conditioning, and specialized features such as 1 $\mu\Omega$ resolution and dry circuit ohms measurement capabilities.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), RS-232
Display	Vacuum Fluorescent Display (VFD)
Calibration Cycle	1 Year
Real-Time Clock	Yes, with battery backup for timestamping

Physical

Power Supply	100V / 120V / 220V / 240V $\pm 10\%$, 45 Hz to 66 Hz and 360 Hz to 440 Hz, 80 VA max
Operating Temperature	0°C to 50°C °C
Dimensions (W×H×D)	485 × 89 × 370 mm
Weight	6.5 kg
Form Factor	2U, full-rack width

DC Voltage

Measurement Ranges	100 mV, 1 V, 10 V, 100 V, 1000 V
Maximum Resolution	100 nV
Maximum Input Voltage	1000 V DC

AC Voltage (True RMS)

Frequency Range	3 Hz to 300 kHz
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DC Current

Maximum Input Current	3 A (front panel)
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Resistance

Measurement Configuration	2-wire / 4-wire
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Temperature

Thermocouple Types Supported	J, K, N, T, E, R, S, B
Thermistor Types Supported	2.252 k Ω , 5 k Ω , 10 k Ω

Frequency and Period

Frequency Measurement Range	3 Hz to 500 kHz
Period Measurement Range	2 μ s to 333 ms
Input Signal Voltage Range	100 mV to 750 V AC

Data Acquisition and Switching (Mainframe)

Number of Module Slots	5
Maximum Multiplexer Channels	200 differential channels (with 300V isolation)
Supported Plug-in Switch/Control Modules	Integra Series 77xx Modules (e.g., 7700, 7702, 7708)

Math and Memory

Reading Memory Capacity (Buffer Size)	110,000 readings
Math Functions	Rel, Min/Max/Average/StdDev, dB, dBm, mX+b, Percent, Limit Test

Connectivity and Interfaces

Command Set (SCPI)	SCPI (Standard Commands for Programmable Instruments)
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Performance

Resolution (Digits)	6.5
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Measurement Configuration

Diode Test Source Current	1 mA
Continuity Threshold Range	1 Ω to 1000 Ω (user selectable)
AC Measurement Method	True RMS, AC-coupled

Triggering & Control

Hardware Triggering	Keithley Trigger Link
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Power

Mains Voltage	100 V / 120 V / 220 V / 240 V $\pm$ 10%
Mains Frequency	45 Hz to 66 Hz and 360 Hz to 440 Hz (automatically sensed)

Compliance & Environmental

Safety Compliance	EN 61010-1
EMC Compliance	Conforms to European Union EMC Directive

Inputs & Outputs

Trigger Link Connector	8-pin micro-DIN
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TECHNOLOGY

Digital Multimeter / Data Acquisition (DAQ)

APPLICATIONS

Data logging, automated test, switch routing, precision measurement

