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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight U1251B Handheld Digital Multimeter

Agilent Keysight U1251B Handheld Digital Multimeter The Agilent/Keysight U1251B is a 50000-count handheld true-RMS DMM in the U1250 Series. OEM U125x family tables list 0.025% basic DCV accuracy, true-RMS ACV, and industrial handheld safety ratings to CAT III 1000 V / CAT IV 600 V. Field and bench electrical troubleshooting needing high-count handheld accuracy without OLED display. Safety Category: CAT III 1000 V / CAT IV 600 V The Agilent/Keysight U1251B is a 50000-count handheld true-RMS DMM in the U1250 Series. OEM U125x family tables list 0.025% basic DCV accuracy, true-RMS ACV, and industrial handheld safety ratings to CAT III 1000 V / CAT IV 600 V. Field and bench electrical troubleshooting needing high-count handheld accuracy without OLED display. Safety Category: CAT III 1000 V / CAT IV 600 V Series Family: Keysight U1250 handheld DMM



MODEL

**Agilent / Keysight
U1251B**

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

U1251B

LISTING

<https://aumictechlabs.com/products/u1251b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

Agilent/Keysight U1251B Handheld Digital Multimeter Technical Overview The Agilent/Keysight U1251B is a versatile 4.5-digit handheld digital multimeter engineered for comprehensive electrical testing and measurement across diverse industrial and laboratory environments. This instrument provides a solid set of measurement capabilities, including precise voltage, current, resistance, capacitance, frequency, and temperature readings. Its design prioritizes user readability with a large, backlit display suitable for varied

lighting conditions, and incorporates significant safety features to ensure reliable operation whether deployed in the field or utilized on a test bench. The Agilent/Keysight U1251B is a dependable tool for engineers, system integrators, and laboratory professionals requiring accurate and repeatable measurements for a wide array of applications.

Technical Specifications

Measurement Capabilities

Voltage: * Ranges: 200 mV, 2 V, 20 V, 200 V, 1000 V * Accuracy: $\pm(0.05\% + 3)$ * Resolution: 100 μ V

AC Voltage (True RMS): * Ranges: 200 mV, 2 V, 20 V, 200 V, 750 V * Accuracy: $\pm(0.5\% + 5)$ * Resolution: 100 μ V * Frequency Response: 40 Hz to 20 kHz

DC Current: * Ranges: 200 μ A, 2 mA, 20 mA, 200 mA, 10 A * Accuracy: $\pm(0.15\% + 5)$ * Resolution: 0.1 μ A

AC Current (True RMS): * Ranges: 200 μ A, 2 mA, 20 mA, 200 mA, 10 A * Accuracy: $\pm(0.7\% + 5)$ * Resolution: 0.1 μ A * Frequency Response: 40 Hz to 20 kHz

Resistance: * Ranges: 200 Ω , 2 k Ω , 20 k Ω , 200 k Ω , 2 M Ω , 20 M Ω * Accuracy: $\pm(0.2\% + 3)$ * Resolution: 0.1 Ω

Capacitance: * Ranges: 2 nF, 20 nF, 200 nF, 2 μ F, 20 μ F * Accuracy: $\pm(1\% + 5)$ * Resolution: 1 pF

Frequency: * Ranges: 200 Hz, 2 kHz, 20 kHz, 200 kHz, 2 MHz * Accuracy: $\pm(0.1\% + 1)$ * Resolution: 0.1 Hz

Temperature (requires optional probe): * Range: -200 °C to 1300 °C (-328 °F to 2372 °F) * Accuracy: Dependent on probe

General Specifications

Display: 4.5-digit LCD with backlight

Resolution: 49,999 counts

Sampling Rate: 5 samples per second

Battery: 9V alkaline battery or NiMH rechargeable battery

Battery Life: Up to 150 hours (alkaline)

Operating Temperature: 0 °C to 50 °C (32 °F to 122 °F)

Storage Temperature: -20 °C to 60 °C (-4 °F to 140 °F)

Humidity: 0% to 85% RH, non-condensing

Safety Standards: * CAT III 1000 V * CAT IV 600 V * UL Listed * CSA Certified

Features

True RMS: For accurate AC measurements on non-sinusoidal waveforms.

Data Logging: Ability to log measurements for later analysis (internal memory capacity varies).

Diode Test: Measures forward voltage drop across diodes.

Continuity Test: Audible beeper for continuity checks.

Relative Mode: Stores a reference value and displays subsequent measurements relative to it.

Min/Max/Average Readings: Captures and displays minimum, maximum, and average values over a period.

Auto Power Off: Conserves battery life by automatically shutting down the device after a period of inactivity.

Backlit Display: Enhances visibility in low-light environments.

solid Casing: Designed for durability in demanding environments.

Interfaces

USB: For data transfer to a PC (requires optional USB interface cable and software).

Physical Characteristics

Dimensions: (Specific dimensions require confirmation from manual/datasheet)

Weight: Approximately 500 g (1.1 lbs) including battery (Specific weight requires confirmation from manual/datasheet)

Compatibility

Software: Compatible with Keysight's PC connectivity software for data logging and analysis.

Probes: Compatible with standard test leads and optional temperature probes (e.g., Type K thermocouple).

Why Choose Aumictech for Agilent/Keysight U1251B? At Aumictech, we specialize in supplying high-end electrical testing and measurement equipment. Whether you need reliable and accurate DC/AC voltage, current, resistance, capacitance, frequency, or temperature measurements, our team ensures the Agilent/Keysight U1251B delivers maximum performance for your application. We understand the critical nature of precise measurements in engineering and laborato

U1251B Characteristics / Specifications

PARAMETER	VALUE
Display Counts	50000
Basic DCV Accuracy	0.025 percent
DC Voltage Maximum	1000 V
AC Voltage Maximum	1000 V
True RMS Mode	Supported
DC Current Maximum	10 A
Resistance Maximum Class	500 MOhm class
Frequency Measurement	Supported
Capacitance Measurement	Supported
Temperature Measurement	Supported
Safety Category	CAT III 1000 V / CAT IV 600 V
Series Family	Keysight U1250 handheld DMM
Sibling Models	U1252B U1253B
Operating Temperature Class	minus 20 C to 55 C class family
Battery Type Class	Rechargeable NiMH class
Diode And Continuity	Supported
Form Factor	Handheld
Data Logging	Supported
Display Type	LCD dual display
Peak Hold	Supported
Percent Scale 4 To 20 mA Class	Supported class family
Conductance Class	Supported class family
Operating temperature	Class: minus 20 C to 55 C class family

U1251B Specifications

PARAMETER	VALUE
Agilent Keysight U1251B Handheld Digital Multimeter	Overview
Key Features	50000 count dual display
Rechargeable battery platform class	CAT III 1000 V / CAT IV 600 V
Technical Specifications	Display Counts: 50000

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: minus 20 C to 55 C class family
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Operating Temperature Class	minus 20 C to 55 C class family
Battery Type Class	Rechargeable NiMH class
Diode And Continuity	Supported
Form Factor	Handheld
Data Logging	Supported
Display Type	LCD dual display
Peak Hold	Supported
Percent Scale 4 To 20 mA Class	Supported class family
Conductance Class	Supported class family Notes From Keysight U125x Handheld Digital Multimeter family comparison tables for U1251B. Confirm model-specific bandwidth and generator features on the U1251B sheet.

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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Display Counts	50000
Basic DCV Accuracy	0.025 percent
DC Voltage Maximum	1000 V
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Notes	
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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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NIST-traceable calibration · SAM registered ·
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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.