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Data Sheet
August 14, 2026

ADVANTEST

Advantest R6451A Digital multimeter

The Advantest R6451A is a 5.5-digit general-purpose DMM in the R6451A/6452A family. OEM datasheet tables list 199999 counts, DCV accuracy plus or minus 0.018 percent plus 5 digits on the 2000 mV range, 1 uV resolution, 80/10/2.5 readings per second, true-RMS ACV to 100 kHz, and a 212 × 88 × 310 mm 2.2 kg package. Bench DCV/ohms, production 5.5-digit test, and RS-232 automated measurement. Dcv 200 mV Accuracy: plus or minus 0.018 percent plus 6 digits Dcv 2000 mV Accuracy: plus or minus 0.018 percent plus 5 digits Line Power: 90 to 250 V depending on option 32 42 44 Remote Interface: RS-232C standard 300 to 9600 baud Accuracy Temperature: 23 plus or minus 5 C 85 percent RH or less 1 year From Advantest R6451A/R6452A 5.5-digit DMM datasheet tables (R6451A columns). Optional R15807 battery unit provides about 6 hours of operation.

MODEL **Advantest R6451A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **R6451A**	LISTING **https://aumictechlabs.com/products/r6451a-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest R6451A is a 5.5-digit digital multimeter engineered for general-purpose electrical measurement across R&D, production, and field environments. This Japanese-manufactured instrument delivers true RMS AC measurements, frequency analysis, and resistance testing with 180 ppm + 5 digits accuracy on DC voltage and ±0.1% ± 6 digits on the 200 mΩ resistance range. The half-width 19" 2U form factor accommodates both benchtop and rack-mount deployment.Technical Specifications Measurement Capability DC Voltage: 0.001 V to 700 V AC

Voltage: up to 700 V with true RMS processing DC Current: up to 10 A AC Current: up to 10 A with true RMS processing Resistance: 2-wire and low-power modes; 200 Ω maximum (AC) Frequency: 20 Hz to 100 kHz (AC voltage), 20 Hz to 5 kHz (AC current) Continuity testing and analog bar graph display Performance Metrics Display resolution: 199999 counts (5.5-digit) Input impedance: ≥1000 MΩ (DC voltage ranges to 200 mV) Sampling rates: 80 SPS (FAST), 10 SPS (MED), 2.5 SPS (SLOW) Analog bar graph update rate: 80 times/secondKey Features True RMS measurement for AC voltage and current eliminates errors from non-sinusoidal waveforms High-speed analog bar graph enables real-time signal trend observation Wide input impedance minimizes loading effects on sensitive circuits Selectable sampling rates optimize response time and noise rejection DC voltage accuracy of 180 ppm + 5 digits ensures precision in calibration-grade applicationsTypical Applications Component characterization and acceptance testing Production line verification and troubleshooting Field service and maintenance diagnostics General electrical bench measurementsCompatibility & Integration Standard RS-232C interface; optional GPIB interface available. Universal power input: 90–250 V accommodates global facility requirements.

R6451A Characteristics / Specifications

PARAMETER	VALUE
Maximum Display	199999 counts
Dcv 200 mV Accuracy	plus or minus 0.018 percent plus 6 digits
Dcv 2000 mV Accuracy	plus or minus 0.018 percent plus 5 digits
Dcv 20 V To 1000 V Accuracy	plus or minus 0.020 percent plus 5 digits
Dcv Resolution 200 mV	1 uV
Dcv Input Impedance Low Ranges	1000 MOhm or more
Maximum Applied Voltage	1100 V DC or AC peak continuous
Resistance 200 Ohm Accuracy	plus or minus 0.04 percent plus 6 digits with null
Resistance 2000 Ohm To 200 kOhm Accuracy	plus or minus 0.02 percent plus 5 digits
Resistance 200 MOhm Accuracy	plus or minus 2.0 percent plus 2 digits
Dci 200 mA Accuracy	plus or minus 0.1 percent plus 6 digits
Dci 10 A Accuracy	plus or minus 0.2 percent plus 6 digits
Acv 45 Hz To 20 kHz	plus or minus 0.2 percent plus 200 digits 5 percent of FS or more
Sampling Fast	80 readings per second 1999 counts
Sampling Slow	2.5 readings per second 199999 counts
Nmrr Slow	approx 60 dB
Cmrr Mid	approx 120 dB
Continuity Range	200 Ohm with 20 Ohm judgment
Power Consumption	15 VA or less
Dimensions	approx 212 W x 88 H x 310 D mm
Mass	2.2 kg maximum main unit
Operating Temperature	0 to 50 C 85 percent RH or less
Line Power	90 to 250 V depending on option 32 42 44
Remote Interface	RS-232C standard 300 to 9600 baud

PARAMETER	VALUE
Accuracy Temperature	23 plus or minus 5 C 85 percent RH or less 1 year

R6451A Specifications

PARAMETER	VALUE
Advantest R6451A Digital Multimeter	Overview
Applications	Bench DCV/ohms, production 5.5-digit test, and RS-232 automated measurement.
Key Features	199999 count slow mode
True RMS AC and AC plus DC	Standard RS-232 optional GPIB
Optional battery pack	Analog bar graph at 80 rdgs/s
Technical Specifications	Maximum Display: 199999 counts

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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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

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Dcv Resolution 200 mV	1 uV
Dcv Input Impedance Low Ranges	1000 MOhm or more
Maximum Applied Voltage	1100 V DC or AC peak continuous
Resistance 200 Ohm Accuracy	plus or minus 0.04 percent plus 6 digits with null
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Resistance 200 MOhm Accuracy	plus or minus 2.0 percent plus 2 digits
Dci 200 mA Accuracy	plus or minus 0.1 percent plus 6 digits
Dci 10 A Accuracy	plus or minus 0.2 percent plus 6 digits
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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
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
https://aumictechlabs.com

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