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Data Sheet

August 14, 2026

ADVANTEST

Advantest R6551 Digital multimeter

Advantest R6551 5.5 Digit Digital Multimeter The Advantest R6551 is a 5.5 digit integrating DMM with 319999 counts. OEM operation manual description lists DC/AC voltage, DC/AC current true RMS, 2/4 wire resistance, 1 μ V DC voltage resolution, 100 readings per second at 4.25 digits, and standard GPIB. Bench and system DC/AC voltage current and resistance measurements with GPIB automation. Resistance Resolution Class: 1 mOhm class The Advantest R6551 is a 5.5 digit integrating DMM with 319999 counts. OEM operation manual description lists DC/AC voltage, DC/AC current true RMS, 2/4 wire resistance, 1 μ V DC voltage resolution, 100 readings per second at 4.25 digits, and standard GPIB. Bench and system DC/AC voltage current and resistance measurements with GPIB automation. Resistance Resolution Class: 1 mOhm class Maximum Sampling: 100 times per second at 4.25 digits



MODEL	CALIBRATION
Advantest R6551	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
R6551	https://aumictechlabs.com/products/r6551-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest R6551 is a precision digital multimeter engineered for high-resolution measurement and automated test system integration. With a 5½ digit display (maximum reading 319999) and 3 ppm resolution, it delivers DC voltage, AC voltage (true RMS), resistance (two-wire and four-wire), DC current, AC current (true RMS), frequency, and continuity measurements across wide ranges. DC voltage measurements span 0.03 V to 1000 V with 1 μ V minimum resolution. AC voltage covers 300 mV to 700 V across 20 Hz to 300 kHz. Current measurements reach 3 A maximum on both

DC and AC circuits with 1 μ A resolution. Resistance measurements utilize a four-wire system across seven ranges from 300 Ω to 300 M Ω , minimizing cable resistance effects.

Technical Specifications

Display: 5½ digits with 319999 maximum reading; 3 ppm resolution

DC Voltage Accuracy: 0.015% (1-year basic)

AC Voltage Accuracy: 1.1% (1-year basic); frequency band 20 Hz to 300 kHz

DC Current Accuracy: 0.13% (1-year basic)

AC Current Accuracy: 2% (1-year basic)

Resistance Accuracy: 2% (1-year basic); seven ranges, 300 Ω to 300 M Ω

Frequency Accuracy: 2%

Sampling Rate: 100 pt/sec (up to 4½ digit display)

Integration Time: User-selectable for stable measurements

Key Features

- NULL operation for offset correction and relative value measurement
- SCALE operation for ratio display
- External trigger input with measurement end signal output
- High-speed auto-ranging
- Setting storage for panel configurations
- GPIB calibration without case opening
- Standard GPIB interface for test system automation
- Optional BCD parallel data output

Typical Applications

Precision electrical characterization in R&D and manufacturing environments; automated test systems requiring high-speed data acquisition; component verification and in-circuit diagnostics; frequency and resistance measurements in production test.

Compatibility & Integration

Standard GPIB connectivity enables seamless integration into ATE platforms. External trigger and measurement end signal connectors support synchronization with multi-instrument test sequences. Optional BCD parallel output provides alternative data path for legacy systems.

R6551 Characteristics / Specifications

PARAMETER	VALUE
Model	R6551
Display Counts	319999 5.5 digits
DC Voltage Resolution	1 uV
Resistance Resolution Class	1 mOhm class
Maximum Sampling	100 times per second at 4.25 digits
AC Voltage Method	true RMS
AC Voltage Frequency Band Class	20 Hz to 300 kHz
Resistance Wiring	2 wire and 4 wire
Functions	DCV ACV DCI ACI resistance
Null Function	offset correction relative
Scale Function	ratio display
External Trigger	yes
Measurement End Signal	output connector
Integration	selectable integration time
Interface Standard	GPIB
EMC Variant	R6551EMC additional front panel and frame shielding
Converter Type	integrating AD
Instrument Type	digital multimeter
Remote Control	GPIB parameter set and data output
Series Family	Advantest R6551/R6551EMC
Display Resolution Class	3 ppm class at full 5.5 digits
Use	bench and automatic instrumentation systems

R6551 Specifications

PARAMETER	VALUE
Advantest R6551 5.5 Digit Digital Multimeter	Overview
Key Features	5.5 digit 319999 count display
True RMS AC 20 Hz to 300 kHz class	100 readings per second at 4.25 digits
Technical Specifications	Model: R6551

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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PARAMETER	VALUE
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Null Function	offset correction relative
Scale Function	ratio display
External Trigger	yes
Measurement End Signal	output connector
Integration	selectable integration time
Interface Standard	GPIB
Optional Interface: OPTOI BCD parallel data output	
Specifications	
PARAMETER	VALUE
EMC Variant	R6551EMC additional front panel and frame shielding
Converter Type	integrating AD
Instrument Type	digital multimeter
Remote Control	GPIB parameter set and data output
Series Family	Advantest R6551/R6551EMC
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Notes

From Advantest R6551/R6551EMC operation manual feature and architecture description. Range by range accuracy tables belong on the printed specification chapter of the same manual.

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.