

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ADVANTEST

Advantest R6144 DC Voltage / Current Calibrator

Advantest R6144 Programmable DC Voltage Current Calibrator The Advantest R6144 is a precision programmable DC voltage and current generator/calibrator for evaluating precision circuits and calibrating temperature controllers. A time-sharing D/A conversion architecture provides high linearity and stability with low noise and fast settling, plus standard GPIB and BCD parallel interfaces for ATE. The Advantest R6144 is a precision programmable DC voltage and current generator/calibrator for evaluating precision circuits and calibrating temperature controllers. A time-sharing D/A conversion architecture provides high linearity and stability with low noise and fast settling, plus standard GPIB and BCD parallel interfaces for ATE.



MODEL

Advantest R6144

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

R6144

LISTING

<https://aumictechlabs.com/products/r6144-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest R6144 is a precision DC voltage and current calibrator engineered for high-accuracy evaluation and calibration of precision instruments, circuits, and components. It delivers voltage outputs up to 32 V and current outputs up to 160 mA with guaranteed accuracy of 0.03% (voltage) and 0.035% (current) over a 6-month interval. The instrument employs time-sharing D/A conversion circuitry to achieve excellent linearity and stability while minimizing settling time and output noise. Technical Specifications Voltage Output: 1 V, 10 V, 30 V ranges with 1 μ V resolution steps Current Output: 1 mA, 10 mA, 100 mA ranges with 100 nA resolution steps Accuracy: 0.03%

(voltage, 6-month guarantee); 0.035% (current, 6-month guarantee) Output Noise: 3 mVp-p - one-fifth of previous generation models Settling Time: Maximum 50 ms to $\pm 0.1\%$ of expected value - one-third faster than prior models Line Regulation: $\pm 0.005\%$ of range or less at rated voltage -15% to +10% Load Regulation: $\pm 0.005\%$ of range or less at maximum load (4-wire connection, excluding 10 mV and 100 mV ranges) Memory: 160-step built-in memory capacity Sweep Function: All-digit continuous variable sweep capability Power Consumption: 27 VA maximum

Key Features Time-sharing D/A conversion circuit ensures superior linearity and output stability Reduced settling time enhances measurement throughput and reliability Low output noise improves signal integrity for precision calibration work Configurable voltage and current ranges accommodate diverse test requirements Built-in memory and sweep function support automated calibration sequences

Typical Applications Calibration of precision temperature controllers and measuring instruments Evaluation and characterization of precision analog circuits and semiconductor devices DC source requirements in automated test environments

Compatibility & Integration The R6144 interfaces via GPIB and BCD parallel connections for integration with external test systems and controllers. Programs developed for the TR6142 predecessor operate without modification on this platform.

Features & description

From manufacturer datasheet

Features

• Voltage to 32 V and current to 160 mA • Resolution 1 μ V / 100 nA steps on lowest ranges • Accuracy 0.03 percent voltage 0.035 percent current (6 months) • Low noise 3 mVp-p class • Settling time 50 ms • Built-in 160 step memory and GPIB plus BCD interfaces

Applications

• Precision circuit and component evaluation • Temperature controller calibration stimulus • Automated DC voltage and current source ATE • High resolution swept DC characterization

R6144 Characteristics / Specifications

PARAMETER	VALUE
Model	R6144
Manufacturer	Advantest
Instrument Type	Programmable DC Voltage Current Calibrator
Alias	R6144; Advantest R6144
Maximum voltage output	32 V
Maximum current output	160 mA
Voltage ranges	10 mV; 100 mV; 1 V; 10 V; 30 V
Current ranges	1 mA; 10 mA; 100 mA
Resolution 10 mV range	1 μ V
Resolution 100 mV range	10 μ V
Resolution 1 V range	100 μ V
Resolution 10 V range	1 mV
Resolution 30 V range	2 mV
Resolution 1 mA range	100 nA
Resolution 10 mA range	1 μ A
Resolution 100 mA range	10 μ A
Voltage accuracy 6 months	0.03 percent of setting plus range error
Current accuracy 6 months class	0.035 percent of setting plus range error
Output noise voltage class	3 mVp-p
Settling time	50 ms max expected value plus or minus 0.1 percent
Built in memory steps	160
Interfaces	GPIB and BCD parallel standard
Power supply standard	90 to 110 Vac 48 to 66 Hz
Power consumption	27 VA max
External dimensions	approx 240 mmWx 88 mmHx 350 mmDMass: approx 4 kg

PARAMETER	VALUE
Operating temperature	0 C to plus 50 C
Storage temperature	-25 C to plus 70 C
Line regulation	plus or minus 0.005 percent of range or less
Load regulation 4 wire	plus or minus 0.005 of range or less
One day voltage stability 10 V class	0.01 percent plus 200 uV
Related predecessor	TR6142 program compatible Notes Specs from Advantest R6144 Programmable DC Voltage/Current Generators datasheet. Confirm Option 32/42/44 mains voltage and 4-wire cabling on the unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	25 C to plus 70 C
Operating temperature	0 C to plus 50 C
Operating Temperature	0 C to plus 50 C
Line regulation	plus or minus 0.005 percent of range or less
Load regulation 4 wire	plus or minus 0.005 of range or less
One day voltage stability 10 V class	0.01 percent plus 200 uV
Related predecessor	TR6142 program compatible Notes Specs from Advantest R6144 Programmable DC Voltage/Current Generators datasheet. Confirm Option 32/42/44 mains voltage and 4-wire cabling on the unit.

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	
Technical Specifications	
PARAMETER	VALUE
Model	R6144
Manufacturer	Advantest
Instrument Type	Programmable DC Voltage Current Calibrator
Alias	R6144; Advantest R6144
Maximum voltage output	32 V
Maximum current output	160 mA
Voltage ranges	10 mV; 100 mV; 1 V; 10 V; 30 V
Current ranges	1 mA; 10 mA; 100 mA
Resolution 10 mV range	1 uV
Resolution 100 mV range	10 uV
Resolution 1 V range	100 uV
Resolution 10 V range	1 mV
Resolution 30 V range	2 mV
Resolution 1 mA range	100 nA
Resolution 10 mA range	1 uA
Resolution 100 mA range	10 uA
Voltage accuracy 6 months	0.03 percent of setting plus range error
Current accuracy 6 months class	0.035 percent of setting plus range error
Output noise voltage class	3 mVp-p
Settling time	50 ms max expected value plus or minus 0.1 percent
Built in memory steps	160
Interfaces	GPIB and BCD parallel standard
Power supply standard	90 to 110 Vac 48 to 66 Hz
Power consumption	27 VA max
External dimensions	approx 240 mm W x 88 mm H x 350 mm D
Mass	approx 4 kg

PARAMETER	VALUE
Operating temperature	0 C to plus 50 C
Storage temperature	-25 C to plus 70 C
Line regulation	plus or minus 0.005 percent of range or less
Load regulation 4 wire	plus or minus 0.005 of range or less
One day voltage stability 10 V class	0.01 percent plus 200 uV
Related predecessor	TR6142 program compatible

Specifications

PARAMETER	VALUE
Model	R6144
Manufacturer	Advantest
Instrument Type	Programmable DC Voltage Current Calibrator
Alias	R6144; Advantest R6144
Maximum voltage output	32 V
Maximum current output	160 mA
Voltage ranges	10 mV; 100 mV; 1 V; 10 V; 30 V
Current ranges	1 mA; 10 mA; 100 mA
Resolution 10 mV range	1 uV
Resolution 100 mV range	10 uV
Resolution 1 V range	100 uV
Resolution 10 V range	1 mV
Resolution 30 V range	2 mV
Resolution 1 mA range	100 nA
Resolution 10 mA range	1 uA
Resolution 100 mA range	10 uA
Voltage accuracy 6 months	0.03 percent of setting plus range error
Current accuracy 6 months class	0.035 percent of setting plus range error
Output noise voltage class	3 mVp-p
Settling time	50 ms max expected value plus or minus 0.1 percent
Built in memory steps	160
Interfaces	GPIB and BCD parallel standard
Power supply standard	90 to 110 Vac 48 to 66 Hz
Power consumption	27 VA max

PARAMETER	VALUE
External dimensions	approx 240 mmWx 88 mmHx 350 mmDMass: approx 4 kg
Operating temperature	0 C to plus 50 C
Storage temperature	-25 C to plus 70 C
Line regulation	plus or minus 0.005 percent of range or less
Load regulation 4 wire	plus or minus 0.005 of range or less
One day voltage stability 10 V class	0.01 percent plus 200 uV
Related predecessor	TR6142 program compatible

Notes

Specs from Advantest R6144 Programmable DC Voltage/Current Generators datasheet. Confirm Option 32/42/44 mains voltage and 4-wire cabling on the unit.

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>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.