

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ADVANTEST

Advantest R3755A PCI Card Network Analyzer, 300MHz

Advantest R3755A Board Network Analyzer 10 kHz to 300 MHz The Advantest R3755A isaPCI half-size board vector network analyzer covering 10 kHz to 300 MHz for reflection (S11) and transmission (S21) measurements of antennas and filters. Compact dual-slot PCI design with under 20 W consumption supports multi-board parallel production test with the companion R3760 high-band board. The Advantest R3755A isaPCI half-size board vector network analyzer covering 10 kHz to 300 MHz for reflection (S11) and transmission (S21) measurements of antennas and filters. Compact dual-slot PCI design with under 20 W consumption supports multi-board parallel production test with the companion R3760 high-band board.



MODEL

Advantest R3755A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

R3755A

LISTING

<https://aumictechlabs.com/products/r3755a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest R3755A is a half-size PCI card network analyzer that brings vector measurement capability to embedded test systems and automated benchtop setups. Operating from 10 kHz to 300 MHz with 1 MHz resolution, it delivers precise characterization of impedance, gain, reflection, and frequency response across four measurement channels. The compact form factor (190 × 126 × 20 mm) and low power draw (15 W maximum) make it ideal for board-level diagnostics, educational labs, and OEM integration where space and cost constraints are critical. Technical

Specifications Signal Source Frequency range: 10 kHz to 300 MHz Frequency resolution: 1 mHz Frequency accuracy: ± 20 ppm (± 1 ppm with OPT.20) Output level: 0 to -30 dBm (10 kHz–1 MHz); $+18$ to -43 dBm (1 MHz–300 MHz) Output resolution: 0.1 dB per step Output connector: SMA (female), $50\ \Omega$ Receiving Section Frequency range: 10 kHz to 300 MHz Average noise floor: -70 dBm at 1 kHz RBW Resolution bandwidth: 10 Hz to 15 kHz (1, 1.5, 2, 3, 4, 5, 7-step selection) Input connector: SMA (female), $50\ \Omega$ Measurement Engine Channels: 4 Parameters: A/R (R internally connected) Formats: Log/Linear amplitude, phase, complex (real/imaginary), Z, R, X, Y, G, B Calibration: Normalize, Full Call (Open/Short/Load) Max measurement points: 1601 per segment Sweep speed: 50 μ sec/point minimum (15 kHz RBW) Electrical Power supply: +5 VDC (5 W), +3.3 VDC (5 W), +12 VDC (1 W), -12 VDC (1 W) Total consumption: ≤ 15 W Physical Form factor: Half-size PCI card Dimensions: 190 W $\times$ 126 H $\times$ 20 D mm Mass: ≤ 1 kg Key Features 1 mHz frequency resolution over 300 MHz span Four parallel measurement channels with independent A/R configuration Arbitrary sweep segmentation with settable RBW and dwell time Full 3-element calibration capability (Open/Short/Load) Parallel I/O interface (8-bit output, 4-bit input, C-MOS logic) Typical Applications Board-level network analysis, component characterization, antenna impedance measurement, educational laboratory testing, and OEM instrument integration. Compatibility & Integration Requires 32-bit, 5 V, half-size PCI slot. Supports Windows XP (32-bit), Vista (32-bit), 7 (32/64-bit), and 10 (64-bit). Development via Visual Studio or Visual Basic/C++ 2008, or Visual Basic/C++ 6.0. Ambient temperature at card location must not exceed $+55\ ^\circ\text{C}$.

Features & description

From manufacturer datasheet

Features

- Frequency coverage 10 kHz to 300 MHz S11 and S21 • 4 measurement channels • Maximum 1601 points per segment • Sweep speed maximum 300 usec per point • 1-Port Full Cal Normalize and Trans Full Cal • PCI half size 2 slot board under 20 W

Applications

- Antenna impedance and return loss 10 kHz to 300 MHz • Filter transmission and reflection production test • PC based multi-unit parallel RF component test • Low-frequency RF module QA with R3760 high-band pairing

R3755A Characteristics / Specifications

PARAMETER	VALUE
Model	R3755A
Manufacturer	Advantest
Instrument Type	Board Network Analyzer
Alias	R3755A; Advantest R3755A
Frequency range S11 S	10 kHz to 300 MHz
Frequency resolution	10 kHz
Frequency accuracy	plus or minus 50 ppm
Frequency accuracy Option	plus or minus 1 ppm stability
Output level	0 to -10 dBm class low band
Output level resolution	0.1 dB
Measurement parameters	Reflection S11; Transmission S21
Measurement channels	4
Measurement points maximum	1601 per segment
Sweep speed maximum	300 usec per point
Average noise level	-70 dBm at RBW 1 kHz
Resolution bandwidth	10 Hz to 15 kHz
Error correction	1-Port Full Cal; Normalize; Trans Full Cal
Output port	SMA female 50 ohm
Input port	SMA female 50 ohm
ParallelIO	8 bit output C-MOS; 4 bit input C-MOS
Power consumption	20 W or less
External dimensions	approx 190 mmWx 126 mmHx 42 mmDMass: 1 kg or less
Host PC	two PCI slots 32 bit 5 V half size
Related high band board	R3760 300 MHz to 6 GHz
Publication	Advantest R3755A/R3760 catalog R3755A/3760-5E Notes Specs from Advantest R3755A/R3760 board network analyzer catalog. Confirm

PARAMETER	VALUE
	Option 20 frequency stability and accessory adapters A170009/A170010 on the system.
Bandwidth	10 Hz to 15 kHz
Return loss	10 kHz to 300 MHz - Filter transmission and reflection production test - PC based multi-unit parallel RF component test - Low-frequency RF module QA with R3760 high-band pairing

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	R3755A
Manufacturer	Advantest
Instrument Type	Board Network Analyzer
Alias	R3755A; Advantest R3755A
Frequency range S11 S21	10 kHz to 300 MHz
Frequency resolution	10 kHz
Frequency accuracy	plus or minus 50 ppm
Frequency accuracy Option 20	plus or minus 1 ppm stability
Output level	0 to -10 dBm class low band
Output level resolution	0.1 dB
Measurement parameters	Reflection S11; Transmission S21
Measurement channels	4
Measurement points maximum	1601 per segment
Sweep speed maximum	300 usec per point
Average noise level	-70 dBm at RBW 1 kHz
Resolution bandwidth	10 Hz to 15 kHz
Error correction	1-Port Full Cal; Normalize; Trans Full Cal
Output port	SMA female 50 ohm
Input port	SMA female 50 ohm
Parallel I O	8 bit output C-MOS; 4 bit input C-MOS
Power consumption	20 W or less
External dimensions	approx 190 mm W x 126 mm H x 42 mm D
Mass	1 kg or less
Host PC	two PCI slots 32 bit 5 V half size
Related high band board	R3760 300 MHz to 6 GHz
Specifications	

PARAMETER	VALUE
Model	R3755A
Manufacturer	Advantest
Instrument Type	Board Network Analyzer
Alias	R3755A; Advantest R3755A
Frequency range S11 S21	10 kHz to 300 MHz
Frequency resolution	10 kHz
Frequency accuracy	plus or minus 50 ppm
Frequency accuracy Option 20	plus or minus 1 ppm stability
Output level	0 to -10 dBm class low band
Output level resolution	0.1 dB
Measurement parameters	Reflection S11; Transmission S21
Measurement channels	4
Measurement points maximum	1601 per segment
Sweep speed maximum	300 usec per point
Average noise level	-70 dBm at RBW 1 kHz
Resolution bandwidth	10 Hz to 15 kHz
Error correction	1-Port Full Cal; Normalize; Trans Full Cal
Output port	SMA female 50 ohm
Input port	SMA female 50 ohm
ParallelIO	8 bit output C-MOS; 4 bit input C-MOS
Power consumption	20 W or less
External dimensions	approx 190 mmWx 126 mmHx 42 mmDMass: 1 kg or less
Host PC	two PCI slots 32 bit 5 V half size
Related high band board	R3760 300 MHz to 6 GHz

Optional 4 port adapter: A170009

Optional forward reverse adapter: A170010

Publication: Advantest R3755A/R3760 catalog R3755A/3760-5E

Notes

Specs from Advantest R3755A/R3760 board network analyzer catalog. Confirm Option 20 frequency stability and accessory adapters A170009/A170010 on the system.

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.