

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

ADVANTEST

Advantest R3753A – Network Analyzer, 5 Hz to 500 MHz

The Advantest R3753A is a 5 Hz to 500 MHz vector network analyzer. OEM R3753 series documentation lists 0.1 Hz frequency resolution, plus 21 to minus 63 dBm source, 115 dB dynamic range at 1 kHz RBW, 0.1 ms/point sweep at 10 kHz RBW, and selectable 50 ohm or 1 MOhm/20 pF inputs. IF filter, crystal, and analog network characterization from audio through VHF, including TDR and impedance. Frequency Accuracy: plus or minus 20 ppm plus or minus 5e-6 per day class Output Level Range: plus 21.0 dBm to minus 63.0 dBm Sweep Types: linear logarithmic and program Disk Format: MS-DOS DD 720 KB HD 1.2 MB and HD 1.44 MB class Input Return Loss Low: greater than or equal to 3 dB 5 Hz to 300 MHz From Advantest R3753A/R3753 series network analyzer specification listings. Semiconductor switches are used for output level and input attenuator for high-speed level sweep.



MODEL

Advantest R3753A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

R3753A

LISTING

<https://aumictechlabs.com/products/r3753a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest R3753A is a vector network analyzer that characterizes electronic components and systems from 5 Hz to 500 MHz. It delivers precise measurements across frequency and time domains with a 115 dB dynamic range (1 kHz RBW), making it suitable for R&D, manufacturing, and quality control workflows. The instrument features three measurement channels, selectable 50 Ω

or 1 M Ω /20 pF input impedance, and comprehensive S-parameter analysis including impedance, admittance, reflection, transmission, group delay, and phase measurements.

Technical Specifications

Frequency Range: 5 Hz to 500 MHz with 0.1 Hz resolution
Frequency Accuracy: $\pm 5 \times 10^{-6}$ /Day; ± 20 ppm
Output Level Range: +21.0 dBm to -63.0 dBm (0.1 dB resolution)
Output Level Accuracy: ± 0.5 dB at 0 dBm, 50 MHz; ± 0.5 dB linearity (+21 to -35 dBm); ± 1.5 dB linearity (-35 to -63 dBm)
Output Level Flatness: ± 2.0 dB (5 Hz to 1 MHz), ± 1.5 dB (1 MHz to 300 MHz), +2.0 dB (300 to 500 MHz)
Output Impedance: 50 Ω
Signal Source Purity: <-20 dBc harmonic distortion; <-30 dBc or -70 dBm non-harmonic spurious; <-75 dBc/Hz phase noise (10 kHz offset)
Dynamic Range: 115 dB (1 kHz RBW)
Input Impedance: 50 Ω or 1 M Ω /20 pF (selectable)
Input Return Loss: ≥ 3 dB (5 Hz to 300 MHz), ≥ 2 dB (300 to 500 MHz)
Channels: 3-channel configuration (Reference, A, B)

Key Features

Frequency and level sweep functions with Start/Stop or Center/Span ranges
Linear, logarithmic, and program sweep types with external trigger support
2-channel simultaneous or alternate sweep modes
Sweep speed to 0.1 ms/point (10 kHz RBW)
Measurement point selection from 3 to 1201 points
Data averaging from 2 to 999 samples
Automatic electric length compensation for phase and group delay
Normalize, 1-port full calibration, and transmission full calibration functions

Programming & Control

GPIO (IEEE-488.2) remote control and data output
RS-232 serial port connectivity
Parallel I/O (8-bit output, 4-bit input/output)
Built-in BASIC controller for ATE integration

R3753A Characteristics / Specifications

PARAMETER	VALUE
Frequency Range	5 Hz to 500 MHz
Frequency Resolution	0.1 Hz
Frequency Accuracy	plus or minus 20 ppm plus or minus 5e-6 per day class
Output Level Range	plus 21.0 dBm to minus 63.0 dBm
Output Level Resolution	0.1 dB
Output Level Accuracy	plus or minus 0.5 dB at 0 dBm 50 MHz
Output Linearity High	plus or minus 0.5 dB plus 21 to minus 35 dBm
Output Linearity Low	plus or minus 1.5 dB minus 35 to minus 63 dBm
Output Flatness Low	plus or minus 2.0 dB 5 Hz to 1 MHz
Output Flatness Mid	plus or minus 1.5 dB 1 MHz to 300 MHz
Output Impedance	50 ohm
Harmonic Distortion	less than minus 20 dBc
Nonharmonic Spurious	less than minus 30 dBc or minus 70 dBm
Phase Noise	less than minus 75 dBc/Hz at 10 kHz offset
Dynamic Range	115 dB at 1 kHz RBW
Input Impedance	50 ohm or 1 MOhm / 20 pF selectable
Channels	3 channel ReferenceABSweep Speed: 0.1 ms per point at 10 kHz RBW two channel four trace
Blanking Time	5 ms short blanking
Sweep Types	linear logarithmic and program
Remote Interface	GPIB
Form Factor	Benchtop
Disk Format	MS-DOS DD 720 KB HD 1.2 MB and HD 1.44 MB class
Input Return Loss Low	greater than or equal to 3 dB 5 Hz to 300 MHz
Return loss	Low: greater than or equal to 3 dB 5 Hz to 300 MHz

R3753A Specifications

PARAMETER	VALUE
Advantest R3753A Network Analyzer	Overview
Key Features	5 Hz start for audio and IF
Technical Specifications	Frequency Range: 5 Hz to 500 MHz

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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Output Flatness Low	plus or minus 2.0 dB 5 Hz to 1 MHz
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Input Return Loss Low	greater than or equal to 3 dB 5 Hz to 300 MHz
Notes	
From Advantest R3753A/R3753 series network analyzer specification listings. Semiconductor switches are used for output level and input attenuator for high-speed level sweep.	

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 ·
30-day returns
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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.