


Aumictech

Test & measurement • bought, sold, repaired, calibrated

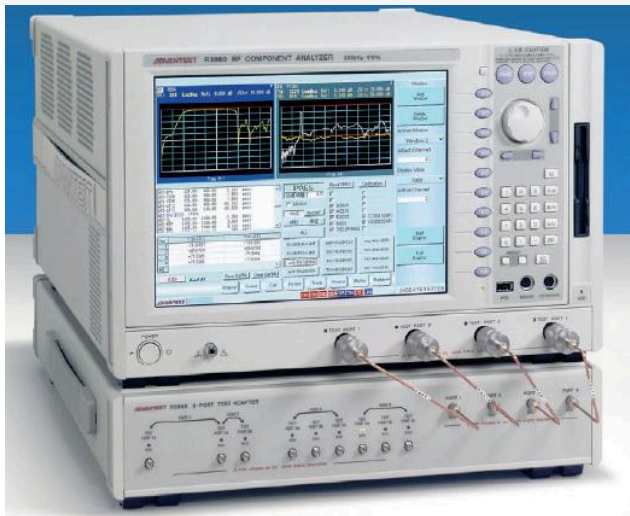
Data Sheet

August 14, 2026

ADVANTEST

Advantest R3860A 300kHz-20GHz 4 Port RF Component Analyzer

Advantest R3860A RF Component Analyzer 300 kHz to 8/20 GHz The Advantest R3860A is a 2-to-4 port RF component analyzer for multifunction RF modules. OEM R3860A/3768/3770 catalog lists 300 kHz to 8 GHz or 20 GHz, 5 us/point sweep at 400 kHz RBW, 16 independent channels, 125 dB typical system dynamic range, 0.0025 dBrms trace noise, and a 424 × 266 × 530 mm 32 kg 500 VA chassis. Multiport S-parameter, harmonic, and frequency-conversion tests of RF hybrid modules, filters, and wireless LAN/cellular front ends. The Advantest R3860A is a 2-to-4 port RF component analyzer for multifunction RF modules. OEM R3860A/3768/3770 catalog lists 300 kHz to 8 GHz or 20 GHz, 5 us/point sweep at 400 kHz RBW, 16 independent channels, 125 dB typical system dynamic range, 0.0025 dBrms trace noise, and a 424 × 266 × 530 mm 32 kg 500 VA chassis. Multiport S-parameter, harmonic, and frequency-conversion tests of RF hybrid modules, filters, and wireless LAN/cellular front ends. Dimensions: approx 424 W x 266 H x 530 D mm Frequency Range 8 GHz Model: 300 kHz to 8 GHz



MODEL

Advantest R3860A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

R3860A

LISTING

<https://aumictechlabs.com/products/r3860a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest R3860A is a 4-port RF component analyzer delivering S-parameter measurements across 300 kHz to 8 GHz standard, with optional coverage to 20 GHz. This instrument combines high-speed acquisition - 5 μ s/point sweep rate - with dynamic range up to 125 dB and trace noise as low as 0.0025 dBrms, enabling precise characterization of RF devices in design, validation, and production environments.

Technical Specifications

Frequency Performance Range: 300 kHz to 8 GHz (standard); 300 kHz to 20 GHz (with optional application package) Accuracy: ± 10 ppm (at 23 $\pm 5^\circ$ C) Resolution: 1 Hz Signal Source Output power: -12 dBm to +13 dBm Resolution: 0.001 dB

Dynamic Range & Noise System dynamic range: Up to 125 dB typical Dynamic range by band: -123 dB (300 kHz-700 MHz); -125 dB (700 MHz-3.8 GHz); -124 dB (3.8-6.0 GHz); -123 dB (6.0-8.0 GHz); -117 dB (8.0-20 GHz, 2-port); -113 dB (8.0-20 GHz, 3/4-port) Trace noise: 0.0025 dBrms typical (300 kHz-10 MHz at 1 kHz RBW); scaling to 0.080 dBrms (15.84-20 GHz at 100 kHz RBW)

Measurement Capability Sweep speed: 5 μ s/point Channels: 16 Display windows: 16 Traces: 16 per channel (max. 16 simultaneous) 4-port measurement set: S11, S22, S33, S44, S21, S31, S41, S12, S32, S42, S13, S23, S43, S14, S24, S34 Parameter conversion: Impedance (Z) and admittance (Y) Display Formats Rectangular: Amplitude (linear/log), Phase, Group-delay, VSWR, Complex (real/imaginary) Smith chart: Amplitude (linear/log), Phase, R+jX, G+jB Polar: Amplitude (linear/log), Phase, Complex (real/imaginary) Connectors & Power Limits Test ports: N-connector female (8 GHz); 3.5 mm connector male (20 GHz) Maximum input: +10 dBm (8 GHz model); +1 dBm (20 GHz model) Destructive level: +21 dBm, 16 Vdc

Key Features Software fixturing for virtual matching circuit simulation and impedance conversion Software balun simulation support measurement speed with minimal trace noise across full bandwidth

Typical Applications RF component design verification, transmission line characterization, filter and amplifier evaluation, antenna impedance measurement, quality assurance testing in production.

R3860A Characteristics / Specifications

PARAMETER	VALUE
Model	R3860A
Dimensions	approx 424 W x 266 H x 530 D mm
Mass	32 kg or less
Frequency Range 8 GHz Model	300 kHz to 8 GHz
Frequency Range 20 GHz Model	300 kHz to 20 GHz
Frequency Setup Resolution	1 Hz
Sweep Time	5 us per point at RBW 400 kHz
Sweep Points	3 to 1601
Sweep Types	linear log program power
Measurement Channels	16
Traces Per Channel	16
Built In Test Ports	2 3 or 4 port options
System Dynamic Range Typical	125 dB average 8 times RBW 10 Hz after isolation cal
Trace Noise Typical	0.0025 dBrms
Output Power Peak Catalog	plus 13 dBm
Output 8 GHz Two Port 0.5 to 4 GHz	minus 7 dBm to plus 13 dBm
Output 8 GHz Two Port 6 to 8 GHz	minus 12 dBm to plus 8 dBm
Output 20 GHz Two Port 15 to 20 GHz	minus 22 dBm to minus 2 dBm
Test Port Connector 8 GHz	N female
Test Port Connector 20 GHz	3.5 mm male
Destructive Input	plus 21 dBm 16 Vdc
External Reference	1 2 5 10 MHz plus or minus 10 ppm 0 dBm 50 ohm
Probe Power	plus or minus 15 V plus or minus 0.5 V 300 mA
LAN	10 Base-T
Printer	IEEE 1284

PARAMETER	VALUE
Operating Temperature	plus 5 to plus 40 C 80 percent RH or less
Storage Temperature	minus 20 to plus 60 C
Power Consumption	500 VA or less
Line Power	100 to 120 VAC and 220 to 240 VAC auto 50/60 Hz

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 20 to plus 60 C
Operating temperature	plus 5 to plus 40 C 80 percent RH or less
Operating Temperature	plus 5 to plus 40 C 80 percent RH or less
Power Consumption	500 VA or less
Line Power	100 to 120 VAC and 220 to 240 VAC auto 50/60 Hz Notes From Advantest R3860A/R3768/R3770 catalog R3860A_3768_70-1Ea. Confirm 8 GHz versus 20 GHz hardware and 2/3/4-port test set on the installed analyzer.

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	
PARAMETER	VALUE
Model	R3860A
Dimensions	approx 424 W x 266 H x 530 D mm
Mass	32 kg or less
Frequency Range 8 GHz Model	300 kHz to 8 GHz
Frequency Range 20 GHz Model	300 kHz to 20 GHz
Frequency Setup Resolution	1 Hz
Sweep Time	5 us per point at RBW 400 kHz
Sweep Points	3 to 1601
Sweep Types	linear log program power
Measurement Channels	16
Traces Per Channel	16
Built In Test Ports	2 3 or 4 port options
System Dynamic Range Typical	125 dB average 8 times RBW 10 Hz after isolation cal
Trace Noise Typical	0.0025 dBrms
Output Power Peak Catalog	plus 13 dBm
Output 8 GHz Two Port 0.5 to 4 GHz: minus 7 dBm to plus 13 dBm Output 8 GHz Two Port 6 to 8 GHz: minus 12 dBm to plus 8 dBm Output 20 GHz Two Port 15 to 20 GHz: minus 22 dBm to minus 2 dBm	
Specifications	
PARAMETER	VALUE
Test Port Connector 8 GHz	N female
Test Port Connector 20 GHz	3.5 mm male
Destructive Input	plus 21 dBm 16 Vdc
External Reference	1 2 5 10 MHz plus or minus 10 ppm 0 dBm 50 ohm
Probe Power	plus or minus 15 V plus or minus 0.5 V 300 mA
LAN	10 Base-T

PARAMETER	VALUE
Printer	IEEE 1284
Operating Temperature	plus 5 to plus 40 C 80 percent RH or less
Storage Temperature	minus 20 to plus 60 C
Power Consumption	500 VA or less
Line Power	100 to 120 VAC and 220 to 240 VAC auto 50/60 Hz

Notes
From Advantest R3860A/R3768/R3770 catalog R3860A_3768_70-1Ea. Confirm 8 GHz versus 20 GHz hardware and 2/3/4-port test set on the installed analyzer.

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 14, 2026

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