

ADVANTEST

R3767CG

The Advantest R3767CG is a high-speed vector network analyzer designed for RF circuit and component analysis. Operating over a frequency range of 300 kHz to 8 GHz, it features an integrated S-parameter test set and Advantest's high-speed signal processing technology, delivering a fast sweep speed of 0.15 ms per point. The instrument is highly configurable, supporting multi-port measurements (3-port and 4-port options) and simultaneous multi-path analysis, making it well-suited for characterization of multi-port RF components.

SPECIFICATIONS

General

Interfaces	GPIB
Display	Color display, supporting 4 channels and 8 traces simultaneously

Physical

Power Supply	90 to 132 V AC / 198 to 250 V AC (automatic selection), 48 to 66 Hz, 300 VA or less
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	424 mm × 220 mm × 450 mm mm
Weight	22 kg kg

Frequency and Amplitude Performance

Frequency Range	300 kHz to 8 GHz
Frequency Tuning Resolution	1 Hz

Inputs, Outputs and Interfaces

RF Input Impedance	50 Ω
Data Storage	3.5-inch Floppy Disk Drive (MS-DOS format compatibility)

Bandwidth and Sweep Characteristics

Sweep Time (High-Speed Mode)	0.15 ms / point
Segment Sweep Settings	Independent setting of frequency, output level, RBW, and settling time for each segment

Vector Network Analysis Features

S-Parameter Measurement Capability	S11 to S44 (16 S-parameters)
Multi-Port Expansion	Standard built-in 4-port test set
Simultaneous Multi-Path Measurement	Supported (using additional input channels in the receive section)

System Architecture and Display

Display Channel Capability	4 channels
Trace Capacity	8 traces
Simultaneous Parameter Display	Up to 4 S-parameters simultaneously

Source Specifications

Signal Source Output Power	-15 to +10 dBm
Power Resolution	0.1 dB

Measurement Port

Test Port Connector Type	Type-N (female)
Test Port Impedance	50 Ω

System Performance

System Dynamic Range	100 dB (typical, 300 kHz to 8 GHz)
Number of Measurement Points	3 to 1201 points

Receiver Specifications

Receiver Bandwidth	10 Hz to 20 kHz (1, 3 step)
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Test Ports

Number of Test Ports	4
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Signal Source

Source Power Range	-15 dBm to +10 dBm
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Measurement Capabilities

Measurement Formats	Log/Linear Magnitude, Phase, Group Delay, Smith Chart, Polar, SWR, Real/Imaginary
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Calibration

Calibration Methods	Normalization, 1-Port Cal, 2-Port Cal, 3-Port Cal, 4-Port Cal, Full 2-Port Cal
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Data Storage

Built-in Floppy Disk Drive	3.5-inch FDD (MS-DOS format, 720 KB / 1.44 MB)
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Software & Programmability

Programming Language Support	Built-in BASIC (for internal test automation)
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Inputs & Outputs

External Video Output	15-pin D-sub (VGA compatible)
Parallel I/O Port	TTL level (compatible with Centronics printer or general-purpose I/O)

Sweep & Trigger

Sweep Modes	Continuous, Single, Number of Times, Hold
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Display Settings

Magnitude Display Resolution	0.001 dB
Phase Display Resolution	0.01 degree

TECHNOLOGY

Vector Network Analysis

APPLICATIONS

RF Component and Circuit Testing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.