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Data Sheet

August 14, 2026

ANRITSU

Anritsu 54169A

Remote Interface: IEEE 488.2 GPIB with plotter control Measurement Modes: transmission return loss precision return loss SWR and power Option 5: add reference channel Option 7: internal distance to fault software From Anritsu 54100A-series integrated scalar analyzer specification (54169A 10 MHz to 40 GHz source). Detectors are Anritsu 560 or 5400 series with AC autozeroing. Measurement Modes: transmission return loss precision return loss SWR and power Option 5: add reference channel Option 7: internal distance to fault software From Anritsu 54100A-series integrated scalar analyzer specification (54169A 10 MHz to 40 GHz source). Detectors are Anritsu 560 or 5400 series with AC autozeroing.



MODEL

Anritsu 54169A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

54169A

LISTING

<https://aumictechlabs.com/products/54169a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu 54169A is a scalar network analyzer purpose-built for characterizing active devices including amplifiers and filters across 10 MHz to 40 GHz. The instrument combines an integral signal source with dual receiver channels, delivering 71 dB dynamic range and crystal-based frequency stability at 0.00001% accuracy. Two independent receiver channels enable simultaneous measurements of transmission and reflection parameters with the analyzer's 50 Ω output impedance. Maximum input handling reaches 16 dBm, supporting both bench and production test environments. Technical Specifications Frequency Range: 10 MHz to 40 GHz Source Frequency Resolution: 100 kHz Source Frequency Accuracy: 0.00001% Output

Impedance: 50 Ω Receiver Channels: 2 Dynamic Range: 71 dB (minimum and maximum) Maximum Input Level: 16 dBm Reference Source: Crystal-based Data Storage: Floppy disk drive with 13 test pattern capacity; NOVRAM backup included Programmability: GPIB Form Factor: Benchtop Key Features Transmission gain/loss measurements with fast, accurate execution Group delay and relative group delay characterization (optional software) Return loss and SWR measurements with high directivity autotester capability Distance-to-fault measurements for field testing (optional software) Low source harmonics and precision return loss for enhanced measurement confidence Built-in automation with fast recall mode for rapid test procedure sequencing Sophisticated limit line controls with automated bandwidth search functions Power measurement capability across the 10 MHz–40 GHz band Typical Applications Production testing and characterization of active RF devices Filter and amplifier validation across microwave frequencies Field troubleshooting and cable fault localization Transmission line and component SWR assessment Compatibility & Integration The 54169A pairs with Anritsu 5607V50 RF detectors and accepts external 60 dB step attenuators (Hewlett Packard 8495B/8495D, 0–26.5 GHz) for systems without internal attenuation. Precision adapters convert RF output to N female connectors for test point integration.

54169A Characteristics / Specifications

PARAMETER	VALUE
Source Frequency Range	10 MHz to 40 GHz
Frequency Resolution	plus or minus 100 kHz
Start Frequency Accuracy	plus or minus 400 kHz
Detector Dynamic Range	minus 55 dBm to plus 16 dBm
Maximum Input Level	plus 16 dBm
Horizontal Points	51 101 201 or 401
Vertical Resolution Amplitude	0.025 dB
Vertical Resolution Delay	0.0025 ns
Vertical Scale Amplitude	0.1 dB per div to 10 dB per div
Vertical Scale Delay	0.1 ns per div to 100 ns per div
Offset Amplitude	minus 99.9 dB to plus 99.9 dB
Offset Delay	minus 99.9 ns to plus 99.9 ns
Trace Averaging	2 4 8 16 32 64 128 or 256 traces
Sweep Time Typical	less than 70 ms single channel 101 points
Trace Update Typical	130 ms similar settings
Power Level Accuracy	plus or minus 1 dB leveled plus or minus 3.0 dB for models above 20 GHz
Step Attenuator Option	70 dB in 10 dB steps
Attenuator Accuracy Add	plus or minus 1.5 dB leveled power accuracy degradation
Output Impedance	50 ohm
Receiver Channels	2 standard inputsAandBoptionalRRatio Displays: A/R and B/R
Remote Interface	IEEE 488.2 GPIB with plotter control
Measurement Modes	transmission return loss precision return loss SWR and power
Return loss	precision return loss SWR and power

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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PARAMETER	VALUE
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Receiver Channels	2 standard inputsAandBoptionalRRatio Displays: A/R and B/R
Remote Interface	IEEE 488.2 GPIB with plotter control
Measurement Modes	transmission return loss precision return loss SWR and power
Option 2: 70 dB RF step attenuator	
Option 5: add reference channelROption 7: internal distance to fault software	
Option 8: relative group delay software	

Notes

From Anritsu 54100A-series integrated scalar analyzer specification (54169A 10 MHz to 40 GHz source).
Detectors are Anritsu 560 or 5400 series with AC autozeroing.

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