

ANRITSU

37369A

The Anritsu 37369A is a high-performance Vector Network Analyzer (VNA) belonging to the Lightning family of instruments. It is designed to perform fast and highly accurate S-parameter measurements on microwave components and devices over a wide frequency range from 40 MHz to 40 GHz. It features an integrated auto-reversing test set, active matrix color display, and built-in bias tees.

SPECIFICATIONS

General

Interfaces	GPIB (x2: System & Dedicated), RS-232C, VGA Out, Parallel Printer Port, PCMCIA Slots (x2), BNC (Trigger, Reference, and Bias Tees)
Display	7.5-inch active-matrix color LCD

Physical

Power Supply	85 to 240 VAC, 48 to 62 Hz, 540 VA maximum
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	426 mm × 222 mm × 508 mm mm
Weight	23 kg kg

Frequency & Source

Minimum Frequency	40 MHz
Maximum Frequency	40 GHz
Frequency Resolution	1 Hz
Internal Reference Frequency	10 MHz
Frequency Accuracy	Same as timebase accuracy

Test Port

Test Port Connector Type	K (male), 2.92 mm compatible
Test Port Impedance	50 Ω nominal
Maximum Safe Input Level	+20 dBm
Internal Bias Tee Inputs	Rear-panel BNC female (x2), up to 500 mA maximum

Receiver & Dynamic Range

Receiver Damage Level	+20 dBm
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Measurement & Sweep Capabilities

Number of Display Channels	4 independent channels
Number of Measurement Points	3 to 1601 points
Measurement Parameters	S11, S21, S12, S22, and user-defined parameter combinations
Display Formats	Log Magnitude, Phase, Group Delay, Linear Magnitude, SWR, Smith Chart (Impedance/Admittance), Polar, Real, Imaginary
Trace Memory	4 active and 4 memory traces
Marker Functions	6 independent markers per channel
Reference Plane Extension	Supported

Calibration & Error Correction

Supported Calibration Methods	SOLT (Short-Open-Load-Thru), LRL (Line-Reflect-Line), LRM (Line-Reflect-Match), Offset Short
Calibration Interpolation	Supported (frequency and power)
Source Power Calibration	Supported
Receiver Calibration	Supported
Flatness Correction	Supported

Interfaces & Connectivity

GPIO System Port	24-pin female, IEEE-488.2 compatible
GPIO Dedicated Port	24-pin female (for plotters and source control)
Serial Port	9-pin D-sub male, RS-232C compatible
Parallel Port	25-pin female (Centronics printer interface)
External Monitor Port	15-pin D-sub female (VGA output)
PCMCIA Card Slots	Type II (x2) on front panel
Floppy Disk Drive	3.5-inch (1.44 MB MS-DOS format)
External Trigger Input	BNC female
10 MHz Reference Input	BNC female
10 MHz Reference Output	BNC female
Horizontal Output	BNC female (0 to 10V sweep ramp)
Auxiliary Analog Inputs	BNC female (x2), $\pm 10V$ range

General & Environmental

Storage Temperature Range	-40 °C to +75 °C
Relative Humidity	5% to 95% non-condensing
Warm-up Time	1 hour
Altitude Limits	Up to 4,600 meters (15,000 feet)

Source Specifications

Maximum Rated Source Power (0.04 to 2 GHz)	+5 dBm
Maximum Rated Source Power (2 to 20 GHz)	+2 dBm
Maximum Rated Source Power (20 to 40 GHz)	-7 dBm
Source Power Resolution	0.1 dB
Power Sweep Range	15 dB minimum

Receiver Specifications

Selectable IF Bandwidths	10 Hz, 100 Hz, 1 kHz, 10 kHz
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Receiver & Source Specifications

Step Attenuators	70 dB (source and receiver, 10 dB steps)
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Internal Bias Tees

Bias Tee Maximum Current	500 mA
Bias Tee Maximum Voltage	40 V

Options

Option 2 (Time Domain)	Enables time domain analysis with impulse and step response modes
Option 15 (High Stability Time Base)	Adds high-stability ovenized 10 MHz crystal oscillator reference
Option 4 (External SCSI Interface)	Adds rear-panel Fast SCSI-2 interface for external storage devices
Option 5 (Receiver Offset)	Enables frequency-offset loop for mixer and doubler measurements
Option 10 (Multi-port Test Set Capability)	Enables control of external multiport test sets

Display

Display Type	Color Active Matrix LCD
Display Size	8.4 in diagonal

Power

Power Consumption	500 VA maximum
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Performance

Sweep Time	< 2 ms per point (IF bandwidth dependent)
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Connectivity

Keyboard Interface	Front panel 5-pin DIN connector
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Safety and Compliance

EMC Compliance	Conforms to 89/336/EEC, EN55011 Class A, EN50082-1
Safety Compliance	Conforms to 73/23/EEC, EN61010-1

TECHNOLOGY

Vector Network Analysis

APPLICATIONS

RF & Microwave Component Characterization

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