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Data Sheet

August 13, 2026

ANRITSU

Anritsu 69369A Synthesized Sweep/Signal Generator, 0.01 to 40 GHz

Anritsu 69369A Ultra Low Noise Synthesized Sweep/Signal Generator 10 MHz to 40 GHz The Anritsu/Wiltron 69369A is an ultra-low-noise synthesized sweep/signal generator covering 0.01 GHz to 40 GHz in the 69A Series. It unifies CW, analog/step sweep, and comprehensive modulation for universal signal requirements through 40 GHz on a single coax output, as the sweep/signal member of the 69×69A family with ultra-low SSB phase noise. The Anritsu/Wiltron 69369A is an ultra-low-noise synthesized sweep/signal generator covering 0.01 GHz to 40 GHz in the 69A Series. It unifies CW, analog/step sweep, and comprehensive modulation for universal signal requirements through 40 GHz on a single coax output, as the sweep/signal member of the 69×69A family with ultra-low SSB phase noise.



MODEL

Anritsu 69369A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

69369A

LISTING

<https://aumictechlabs.com/products/69369a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 69369A is a synthesized sweep/signal generator delivering precision signal generation from 0.01 GHz to 40 GHz in a single coaxial output. It combines ultra-low phase noise, wide dynamic range, and advanced modulation capabilities to serve telecommunications, research, and electronics testing applications. The instrument supports multiple sweep modes,

internal and external modulation, and integrates with network analyzer systems for comprehensive signal characterization across microwave and millimeter-wave frequencies.

Technical Specifications

Frequency Generation
Frequency range: 0.01 GHz to 40 GHz
Frequency resolution: 1 kHz (standard), 0.1 Hz (Option 11), 100 kHz (under Wiltron 360B VNA control)
Frequency accuracy: Traceable to internal or external 10 MHz time base
External reference input: 10 MHz
Signal Performance
Phase noise (SSB): -100 dBc at 10 kHz offset from 10 GHz carrier
Output power range: +17 dBm (maximum) to -125 dBm (minimum)
Power output: Leveled across specified range
Sweep Capabilities
Sweep modes: CW, step sweep, manual sweep, power sweep, alternate sweep
Maximum switching time: < 15 ms + 1 ms/GHz step, or < 40 ms (whichever is less); < 8.5 ms/step under Wiltron 360B VNA control
Sweep width: 1 MHz to full range continuous
Dwell time per step: 1 ms to 99 seconds
Modulation
Internal AM, FM, phase modulation (Option 06), and pulse modulation
User-downloaded complex modulation and arbitrary waveforms
Seven internal modulating waveforms including Gaussian noise
Pulse variants: doublet, triplet, quadruplet for RADAR testing
Synchronized simultaneous modulations

Time Base Stability
Standard aging: $< 2 \times 10^{-8}$ /day
Standard temperature: $< 2 \times 10^{-8}/^{\circ}\text{C}$ (0°C to 55°C)
Option 16 (High Stability): $< 5 \times 10^{-10}$ /day aging; $< 2 \times 10^{-10}/^{\circ}\text{C}$ temperature

Key Features
Single coaxial output spanning DC to 40 GHz eliminates multi-band switching
Step sweep speeds under 8.5 ms enable rapid device characterization
Dual-path modulation - simultaneous internal and arbitrary waveform synthesis
Extended dwell times (to 99 seconds) support transient measurements
Harmonics control at maximum output power

Typical Applications
Component and subsystem testing across microwave and millimeter-wave bands
Network analyzer integration for S-parameter and time-domain measurements
RADAR signal simulation and blind-spot testing
Phase noise and spectral purity evaluation
Modulation development and validation

Compatibility & Integration
Direct control interface with Wiltron 360B vector network analyzer; supports external 10 MHz reference synchronization for phase-coherent multi-instrument operation.

Features & description

From manufacturer datasheet

Features

- Coverage 0.01 to 40 GHz • Ultra low noise 69300A universal architecture • Analog, step, alternate, and manual sweep • Internal/external AM, FM, pulse; optional phase modulation • Optional complex modulation and internal power meter • Optional 0.1 Hz resolution and oven time base • GPIB remote control • K female RF output class through 40 GHz

Applications

- CW and swept stimulus 10 MHz to 40 GHz • Modulated microwave signal simulation • Network analysis and ATE source applications • Radar/EW receiver testing • Single box replacement for separate CW/sweep/signal instruments • Low phase noise LO substitution to 40 GHz

High power Option 15 greater than 20 to 40 GHz: +6 dBm

Output power resolution: 0.01 dB Frequency resolution standard: 1 kHz Frequency resolution Option 11: 0.1 Hz Analog sweep time: 30 ms to 99 s Step sweep steps: 1 to 10000 List sweep points: up to 2000 per table SSB phase noise at 10 GHz 10 kHz offset: -100 dBc/Hz class SSB phase noise at 40 GHz 10 kHz offset: -94 dBc/Hz class AM bandwidth 3 dB: DC to 50 kHz minimum Pulse PRF leveled: 100 Hz to 5 MHz class Minimum leveled power without attenuator: to -15 dBm (-20 dBm typical) Minimum leveled power with attenuator: to -120 dBm class CW accuracy: same as internal or external 10 MHz time base Internal time base aging: less than 2×10^{-8} /day Internal time base aging Option 16: less than 5×10^{-10} /day RF output connector: TypeKfemale Remote control: GPIB Dimensions: 429 mmWx 133 mmHx 597 mmDMass: less than or equal to 23 kg Related CW model: 69069A Related sweep model: 69169A Related signal generator: 69269A Related 68B counterpart: 68369B Notes Specs from Anritsu/Wiltron 69A Series datasheet for 69×69A / 69369A (0.01–40 GHz; 6XX69 power tables). Confirm options and leveled power on the unit.

69369A Characteristics / Specifications

PARAMETER	VALUE
Model	69369A
Manufacturer	Anritsu (Wilton 69A Series)
Instrument Type	Ultra Low Noise Synthesized Sweep/Signal Generator
Alias	69369A; Anritsu 69369A
Frequency range	0.01 GHz to 40 GHz
Family	69A Series ultra low noise sweep/signal
Leveled power 0.01 to less than 2 GHz	+13 dBm
Leveled power 2 to 20 GHz	+9 dBm
Leveled power greater than 20 to 40 GHz	+6 dBm
Leveled power with step attenuator 0.01 to less than 2 GHz	+11 dBm
Leveled power with step attenuator 2 to 20 GHz	+7 dBm
Leveled power with step attenuator greater than 20 to 40 GHz	+3 dBm
High power Option 15 0.01 to 20 GHz class	+13 dBm
High power Option 15 greater than 20 to 40 GHz	+6 dBm
Output power resolution	0.01 dB
Frequency resolution standard	1 kHz
Frequency resolution Option	0.1 Hz
Analog sweep time	30 ms to 99 s
Step sweep steps	1 to 10000
List sweep points	up to 2000 per table
SSB phase noise at 10 GHz 10 kHz offset	-100 dBc/Hz class
SSB phase noise at 40 GHz 10 kHz offset	-94 dBc/Hz class

PARAMETER	VALUE
AM bandwidth 3 dB	DC to 50 kHz minimum
Pulse PRF leveled	100 Hz to 5 MHz class
Minimum leveled power without attenuator	to -15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	to -120 dBm class
CW accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2×10^{-8} /day
Internal time base aging Option	less than 5×10^{-10} /day
RF output connector	TypeKfemale
Remote control	GPIO
Dimensions	429 mmWx 133 mmHx 597 mmDMass: less than or equal to 23 kg
Related CW model	69069A
Related sweep model	69169A
Related signal generator	69269A
Related 68B counterpart	68369B Notes Specs from Anritsu/Wiltron 69A Series datasheet for 69×69A / 69369A (0.01–40 GHz; 6XX69 power tables). Confirm options and leveled power on the unit.
Bandwidth	3 dB: DC to 50 kHz minimum

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
AM bandwidth 3 dB	DC to 50 kHz minimum
Pulse PRF leveled	100 Hz to 5 MHz class
Minimum leveled power without attenuator	to -15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	to -120 dBm class
CW accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2 x 10^-8/day
Internal time base aging Option 16	less than 5 x 10^-10/day
RF output connector	Type K female
Remote control	GPIB
Dimensions	429 mm W x 133 mm H x 597 mm D
Mass	less than or equal to 23 kg
Related CW model	69069A
Related sweep model	69169A
Related signal generator	69269A
Related 68B counterpart	68369B
Specifications	
PARAMETER	VALUE
Model	69369A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Ultra Low Noise Synthesized Sweep/Signal Generator
Alias	69369A; Anritsu 69369A
Frequency range	0.01 GHz to 40 GHz
Family	69A Series ultra low noise sweep/signal
Leveled power 0.01 to less than 2 GHz: +13 dBm	
Leveled power 2 to 20 GHz: +9 dBm	
Leveled power greater than 20 to 40 GHz: +6 dBm	
Leveled power with step attenuator 0.01 to less than 2 GHz: +11 dBm	

Leveled power with step attenuator 2 to 20 GHz: +7 dBm
Leveled power with step attenuator greater than 20 to 40 GHz: +3 dBm
High power Option 15 0.01 to 20 GHz class: +13 dBm
High power Option 15 greater than 20 to 40 GHz: +6 dBm

Specifications

PARAMETER	VALUE
Output power resolution	0.01 dB
Frequency resolution standard	1 kHz
Frequency resolution Option 11	0.1 Hz
Analog sweep time	30 ms to 99 s
Step sweep steps	1 to 10000
List sweep points	up to 2000 per table

SSB phase noise at 10 GHz 10 kHz offset: -100 dBc/Hz class
SSB phase noise at 40 GHz 10 kHz offset: -94 dBc/Hz class

Specifications

PARAMETER	VALUE
AM bandwidth 3 dB	DC to 50 kHz minimum
Pulse PRF leveled	100 Hz to 5 MHz class
Minimum leveled power without attenuator	to -15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	to -120 dBm class
CW accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2 x 10 ⁻⁸ /day
Internal time base aging Option 16	less than 5 x 10 ⁻¹⁰ /day
RF output connector	TypeKfemale
Remote control	GPIOB
Dimensions	429 mmWx 133 mmHx 597 mmDMass: less than or equal to 23 kg
Related CW model	69069A
Related sweep model	69169A
Related signal generator	69269A
Related 68B counterpart	68369B

Notes
Specs from Anritsu/Wiltron 69A Series datasheet for 69x69A / 69369A (0.01-40 GHz; 6XX69 power tables).
Confirm options and leveled power on the unit.

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.