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Data Sheet

August 13, 2026

ANRITSU

Anritsu 69359A Synthesized Sweep/Signal Generator, 0.01 to 26.5 GHz

Anritsu 69359A Synthesized Sweep/Signal Generator 0.01–26.5 GHz The Anritsu/Wiltron 69359A is the highest-capability 69A Series universal synthesizer covering 0.01 GHz to 26.5 GHz. It combines CW, analog/step/manual sweep, and full AM/FM/phase/pulse modulation in one package for microwave stimulus and signal-simulation applications. Related 69x family members share the same band with reduced modulation or sweep feature sets. The Anritsu/Wiltron 69359A is the highest-capability 69A Series universal synthesizer covering 0.01 GHz to 26.5 GHz. It combines CW, analog/step/manual sweep, and full AM/FM/phase/pulse modulation in one package for microwave stimulus and signal-simulation applications. Related 69x family members share the same band with reduced modulation or sweep feature sets.



MODEL

Anritsu 69359A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

69359A

LISTING

<https://aumictechlabs.com/products/69359a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 69359A is a synthesized sweep/signal generator delivering precision RF signal generation across 0.01 GHz to 26.5 GHz. Operating in both sweep and continuous wave modes, It has ultra-low phase noise and high spectral purity for demanding radar, communication, and

advanced test environments. The instrument supports multiple modulation formats AM, FM, and Pulse - with simultaneous synchronized modulation capability. Its flexible sweep architecture accommodates alternate, analog, power, and step modes, with programmable frequency agility storing up to 1000 non-sequential frequencies under GPIB control.

Technical Specifications

Frequency Range: 0.01 GHz to 26.5 GHz Output Power: Maximum 13 dBm; Minimum -125 dBm
Phase Noise: SSB phase noise -105 dBc/Hz to -63 dBc/Hz Output Accuracy: ± 2 dB Power Consumption: 190 VA minimum Sweep Modes: Alternate, Analog, Power, Step, Manual Step
Sweep Range: 1 to 10,000 steps Sweep Width: 1 kHz to full range (0.1 Hz with Option 11) Dwell Time per Step: 1 ms to 99 seconds Frequency Switching Time: $< 15 \text{ ms} + 1 \text{ ms/GHz step size}$ or $< 40 \text{ ms}$ maximum Programmable Frequencies: Up to 1,000 non-sequential addresses

Key Features

AM, FM, and Pulse modulation with user-downloadable arbitrary waveforms Phase-locked step sweep across all frequency steps Master/slave operation capability User-level flatness correction and 360B SS Mode Self-test and secure mode functions Step size resolution from 1 kHz to full instrument range

Typical Applications

Advanced radar system testing and validation
Communication system characterization High-frequency component and subsystem evaluation
Precision signal sourcing in demanding laboratory environments

Compatibility & Integration

GPIB control interface with SCPI command support enables remote operation and integration into automated test systems. Master/slave configuration supports multi-instrument coordination.

Features & description

From manufacturer datasheet

Features

• Full sweep/signal capability in 69300A class • Coverage 0.01 GHz to 26.5 GHz • Analog, step, alternate, and manual sweeps • Internal and external AM/FM/pulse modulation • Optional phase modulation Option 6 • Ultra low noise 69A synthesizer architecture • Optional step attenuator • GPIB remote control

Applications

• Swept microwave component characterization 0.01 GHz to 26.5 GHz • High performance AM/FM/phase/pulse signal simulation • Network analysis stimulus and ATE source • Radar and EW modulated signal generation • Phase locked step and analog frequency sweeps

69359A Characteristics / Specifications

PARAMETER	VALUE
Anritsu 69359A Synthesized Sweep/Signal Generator 0.	26.5 GHz Overview The Anritsu/Wiltron 69359A is the highest-capability 69A Series universal synthesizer covering 0.01 GHz to 26.5 GHz. It combines CW, analog/step/manual sweep, and full AM/FM/phase/pulse modulation in one package for microwave stimulus and signal-simulation applications. Related 69x family members share the same band with reduced modulation or sweep feature sets.
Model	69359A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Synthesized Sweep/Signal Generator
Alias	69359A; Anritsu 69359A; Wiltron 69359A
Frequency range	0.01 GHz to 26.5 GHz
Family	69A Series ultra low noise
Output power resolution	0.01 dB
Source impedance	50 ohm nominal
Source SWR internal leveling below 2 GHz	less than 1.7 typical
Source SWR 2 to 20 GHz	less than 1.6 typical
Source SWR above 20 GHz	less than 2.0 typical
Power level stability vs temperature	0.04 dB/degCtypical
Internal leveling	yes at output connector
RF on off	yes
Level offset	yes
CW frequency resolution standard	1 kHz class
CW frequency resolution Option	0.1 Hz
CW accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2×10^{-8} /day class
Internal time base aging Option	less than 5×10^{-10} /day class

PARAMETER	VALUE
Residual FM 0.5 to 1.0 GHz class	less than 10 Hz RMS
Residual FM 1.0 to 2.2 GHz class	less than 20 Hz RMS
Residual FM 2.2 to 20 GHz class	less than 40 Hz RMS
Step attenuator option to 26.5 GHz	Option 2A 110 dB
Step attenuator option to 40 GHz	Option 2B 110 dB
Step attenuator option to 50 GHz	Option 2C 90 dB
Step attenuator option to 60 GHz	Option 2D 90 dB
Rack mount option	Option 1
Remote control	GPIOB
Dimensions	429 mmWx 133 mmHx 597 mmDMass: less than or equal to 23 kg
Leveled output power 0.01 to less than 2 GHz class	+13 dBm
Leveled output power 2 to 20 GHz class	+13 dBm
Leveled output power greater than 20 to 26.5 GHz class	+10 dBm
Leveled output with step attenuator 0.01 to less than 2 GHz class	+11 dBm
Leveled output with step attenuator 2 to 20 GHz class	+11 dBm
Leveled output with step attenuator greater than 20 to 26.5 GHz class	+7.5 dBm
RF output connector	TypeKfemale
Analog sweep width	1 MHz to full range
Analog sweep time	30 ms to 99 s
Analog sweep accuracy class	lesser of ± 30 MHz or $(\pm 2 \text{ MHz} + 0.25\% \text{ of sweep width})$ at ≤ 50 MHz/ms
Step sweep	every frequency step phase locked
Output mode	CW, sweep, and modulated signal
Related CW model	69059A
Related sweep model	69159A

PARAMETER	VALUE
Related signal model	69259A
Primary use	universal sweep/signal microwave synthesis 0.01–26.5 GHz Notes Specs from Anritsu/Wiltron 69A Series datasheet tables for 69359A (0.01–26.5 GHz Sweep/Signal). Series: 69000A CW, 69100A Sweep, 69200A Signal, 69300A Sweep/Signal. Confirm options, max leveled power on calibration label, and connector type.

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.

performance AM/FM/phase/pulse signal simulation

- Network analysis stimulus and ATE source
- Radar and EW modulated signal generation
- Phase locked step and analog frequency sweeps

Key Features

- Full sweep/signal capability in 69300A class
- Coverage 0.01 GHz to 26.5 GHz
- Analog, step, alternate, and manual sweeps
- Internal and external AM/FM/pulse modulation
- Optional phase modulation Option 6
- Ultra low noise 69A synthesizer architecture
- Optional step attenuator
- GPIB remote control

Technical Specifications

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PARAMETER	VALUE
Model	69359A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Synthesized Sweep/Signal Generator
Alias	69359A; Anritsu 69359A; Wiltron 69359A
Frequency range	0.01 GHz to 26.5 GHz
Family	69A Series ultra low noise
Output power resolution	0.01 dB
Source impedance	50 ohm nominal
Source SWR internal leveling below 2 GHz	less than 1.7 typical
Source SWR 2 to 20 GHz	less than 1.6 typical
Source SWR above 20 GHz	less than 2.0 typical
Power level stability vs temperature	0.04 dB/deg C typical
Internal leveling	yes at output connector
RF on off	yes
Level offset	yes
CW frequency resolution standard	1 kHz class
CW frequency resolution Option 11	0.1 Hz
CW accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2 x 10^-8/day class

PARAMETER	VALUE
Internal time base aging Option 16	less than 5×10^{-10} /day class
Residual FM 0.5 to 1.0 GHz class	less than 10 Hz RMS
Residual FM 1.0 to 2.2 GHz class	less than 20 Hz RMS
Residual FM 2.2 to 20 GHz class	less than 40 Hz RMS
Step attenuator option to 26.5 GHz	Option 2A 110 dB
Step attenuator option to 40 GHz	Option 2B 110 dB
Step attenuator option to 50 GHz	Option 2C 90 dB
Step attenuator option to 60 GHz	Option 2D 90 dB
Rack mount option	Option 1
Remote control	GPIO
Dimensions	429 mm W x 133 mm H x 597 mm D
Mass	less than or equal to 23 kg

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Remote control	GPIB
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Leveled output power 0.01 to less than 2 GHz class: +13 dBm
 Leveled output power 2 to 20 GHz class: +13 dBm
 Leveled output power greater than 20 to 26.5 GHz class: +10 dBm
 Leveled output with step attenuator 0.01 to less than 2 GHz class: +11 dBm
 Leveled output with step attenuator 2 to 20 GHz class: +11 dBm
 Leveled output with step attenuator greater than 20 to 26.5 GHz class: +7.5 dBm

Specifications

PARAMETER	VALUE
RF output connector	TypeKfemale
Analog sweep width	1 MHz to full range
Analog sweep time	30 ms to 99 s
Analog sweep accuracy class	lesser of ± 30 MHz or $(\pm 2 \text{ MHz} + 0.25\% \text{ of sweep width})$ at ≤ 50 MHz/ms
Step sweep	every frequency step phase locked
Output mode	CW, sweep, and modulated signal
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Related signal model	69259A
Primary use	universal sweep/signal microwave synthesis 0.01–26.5 GHz

Notes
 Specs from Anritsu/Wiltron 69A Series datasheet tables for 69359A (0.01–26.5 GHz Sweep/Signal). Series: 69000A CW, 69100A Sweep, 69200A Signal, 69300A Sweep/Signal. Confirm options, max leveled power on calibration label, and connector type.

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

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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.