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Data Sheet

August 13, 2026

ANRITSU

Anritsu 69353A Synthesized Sweep/Signal Generator, 2 to 26.5 GHz

Anritsu 69353A Synthesized Sweep/Signal Generator 2–26.5 GHz The Anritsu/Wiltron 69353A is the highest-capability 69A Series universal synthesizer covering 2 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 69353A is the highest-capability 69A Series universal synthesizer covering 2 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 69353A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

69353A

LISTING

<https://aumictechlabs.com/products/69353a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu 69353A is a synthesized sweep/signal generator operating across 2 to 26.5 GHz, engineered for component and system evaluation in defense and telecommunications applications. It delivers stable, phase-locked output with fast frequency switching and minimal harmonic content. The instrument supports multiple sweep modes CW, step, analog, manual, and

alternate sweep - with flexible configuration across up to 10,000 steps. Internal modulation generators provide AM, FM, phase, and pulse modulation alongside user-downloadable complex waveforms. Five communication interfaces ensure seamless integration into automated test environments. Technical Specifications Frequency Range: 2 GHz to 26.5 GHz Output Power: Maximum: +17 dBm Minimum: -125 dBm Phase Noise: -100 dBc/Hz SSB at 10 kHz offset from 10 GHz Frequency Resolution: 0.1 Hz (with Option 11) Switching Speed: <15 ms + 1 ms/GHz step size, or <40 ms maximum Sweep Capabilities: CW, step, analog, manual, and alternate sweep modes Step range: 1 to 10,000 steps with 1 kHz to full-range step size (0.1 Hz option available) Sweep width: 1 kHz to full range, independently selectable Phase-locked operation on all frequency steps Modulation: Internal AM, FM, phase modulation, pulse modulation Seven modulating waveforms including Gaussian noise and user-defined arbitrary patterns User-downloadable complex modulation capabilities External or internal pulse parameter control Harmonic Output: Low harmonic content Interfaces: GPIB (IEEE-488), USB, LAN Key Features Phase-locked synthesized output ensures frequency stability across the full operating range Variable step size and count accommodate precision component characterization and rapid system-level testing Multiple modulation modes support complex signal scenarios without external equipment Fast switching enables efficient automated measurement sequences Typical Applications Component and subsystem validation in microwave and millimeter-wave systems; RF circuit characterization; telecommunications infrastructure testing; defense-sector signal analysis. Compatibility & Integration Standard GPIB, USB, and LAN interfaces enable direct integration into test automation frameworks and existing laboratory control systems.

Features & description

From manufacturer datasheet

Features

• Full sweep/signal capability in 69300A class • Coverage 2 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 2 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

High power Option 15 20 to 26.5 GHz: +10 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: 69053A Related sweep model: 69153A Related signal model: 69253A Primary use: universal sweep/signal microwave synthesis 2–26.5 GHz Notes Specs from Anritsu/Wiltron 69A Series datasheet tables for 69353A (2–26.5 GHz Sweep/Signal). Series: 69000A CW, 69100A Sweep, 69200A Signal, 69300A Sweep/Signal. Confirm options, max leveled power on calibration label, and connector type.

69353A Characteristics / Specifications

PARAMETER	VALUE
Anritsu 69353A Synthesized Sweep/Signal Generator	26.5 GHz Overview The Anritsu/Wiltron 69353A is the highest-capability 69A Series universal synthesizer covering 2 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	69353A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Synthesized Sweep/Signal Generator
Alias	69353A; Anritsu 69353A; Wiltron 69353A
Frequency range	2 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 2 to 20 GHz class	+9 dBm
Leveled output power greater than 20 to 26.5 GHz class	+6 dBm
Leveled output with step attenuator 2 to 20 GHz class	+7 dBm
Leveled output with step attenuator greater than 20 to 26.5 GHz class	+3.5 dBm
High power Option 15 2 to less than 20 GHz	+13 dBm
High power Option 15 20 to 26.5 GHz	+10 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	69053A
Related sweep model	69153A

PARAMETER	VALUE
Related signal model	69253A
Primary use	universal sweep/signal microwave synthesis 2–26.5 GHz Notes Specs from Anritsu/Wiltron 69A Series datasheet tables for 69353A (2–26.5 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 2 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
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Instrument Type	Synthesized Sweep/Signal Generator
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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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Dimensions	429 mmWx 133 mmHx 597 mmDMass: less than or equal to 23 kg

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 Leveled output power greater than 20 to 26.5 GHz class: +6 dBm
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 Leveled output with step attenuator greater than 20 to 26.5 GHz class: +3.5 dBm
 High power Option 15 2 to less than 20 GHz: +13 dBm
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Specifications

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RF output connector	TypeKfemale
Analog sweep width	1 MHz to full range
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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.