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Data Sheet

August 13, 2026

ANRITSU

Anritsu 69177A Synthesized Sweep Generator, 0.01 GHz to 50.0 GHz

Anritsu 69177A Synthesized Sweep Generator 10 MHz to 50 GHz The Anritsu/Wiltron 69177A is a 69A Series synthesized sweep generator covering 0.01 GHz to 50 GHz. It provides broadband analog and phase-locked step sweeps for RF through mmWave network analysis as the sweep member of the 69×77A family. The Anritsu/Wiltron 69177A is a 69A Series synthesized sweep generator covering 0.01 GHz to 50 GHz. It provides broadband analog and phase-locked step sweeps for RF through mmWave network analysis as the sweep member of the 69×77A family.



MODEL

Anritsu 69177A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

69177A

LISTING

<https://aumictechlabs.com/products/69177a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu 69177A is a synthesized sweep generator delivering precision microwave signal generation across 0.01 GHz to 50.0 GHz. Built for automated test systems and component characterization, it combines fast frequency switching with ultra-low phase noise in a single, cost-effective instrument. The 69177A anchors Anritsu's El Toro synthesizer family, with related models extending coverage to 65 GHz and waveguide options to 110 GHz.

Technical Specifications

Frequency & Resolution Frequency Range: 0.01 GHz to 50.0 GHz Frequency Resolution: 1 kHz (0.1 Hz with Option 11) Output Power Maximum Power: +17 dBm Minimum Power: -125 dBm Power

Resolution: 0.01 dB steps Output Accuracy: 2.5 dB Output Impedance: 50 Ohm Phase Noise SSB
Phase Noise at 10 kHz offset (10 GHz): -100 dBc Minimum SSB Noise: -96 dBc/Hz Maximum SSB
Noise: -54 dBc/Hz Sweep Performance Step Sweep Switching Time: Less than 15 ms + 1 ms/GHz
step size (typical max. less than 40 ms) Analog Sweep Switching Time: Less than 40 ms Step
Sweep Dwell Time: 1 ms to 99 seconds Analog Sweep Width: 1 kHz to full range (0.1 Hz with
Option 11) Spurious Performance Harmonics: -40 dBc Non-Harmonics: -40 dBc Time Base Aging:
Less than 2×10^{-8} /day (less than 5×10^{-10} /day with Option 16) Temperature Stability: Less than 2×10^{-8} /°C (0°C to 55°C); less than 2×10^{-10} /°C with Option 16

Key Features Multiple sweep modes: CW, step, analog, power, alternate, and master/slave Internal AM, FM, phase, and pulse modulation User-downloadable complex modulation support Manual sweep mode with selectable step count or step size All frequency steps in analog sweep are phase-locked Self-test functionality included Secure mode included

Typical Applications Automated test system integration, component characterization, microwave circuit validation, and signal source applications requiring phase-locked frequency agility.

Compatibility & Integration 50 Ohm output impedance for standard microwave system coupling. Compatible with external 10 MHz time base for synchronization and frequency accuracy control.

Features & description

From manufacturer datasheet

Features

• Synthesized sweep coverage 0.01 to 50 GHz • Analog and phase locked step sweep • Alternate and manual sweep modes • Ultra low noise 69100A family • Optional step attenuator Option 2C class • Internal leveling at RF output • Marker functions in analog sweep • GPIB remote control

Applications

• Broadband swept stimulus 0.01 to 50 GHz • mmWave network analysis source • Component frequency response to 50 GHz • ATE rack sweeper with GPIB • Phase locked step sweeps

69177A Characteristics / Specifications

PARAMETER	VALUE
Model	69177A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Synthesized Sweep Generator
Alias	69177A; Anritsu 69177A; Wiltron 69177A
Frequency range	10 MHz to 50 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
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

PARAMETER	VALUE
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	GPIB
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	+12 dBm
Leveled output power 2 to 20 GHz class	+10 dBm
Leveled output power greater than 20 to 40 GHz class	+2.5 dBm
Leveled output power greater than 40 to 50 GHz class	+2.5 dBm
Leveled output with step attenuator 0.01 to less than 2 GHz class	+10 dBm
Leveled output with step attenuator 2 to 20 GHz class	+8.5 dBm
Leveled output with step attenuator greater than 20 to 40 GHz class	0 dBm
Leveled output with step attenuator greater than 40 to 50 GHz class	-1 dBm
Analog sweep width	1 MHz to full range
Analog sweep time	30 ms to 99 s
Step sweep	every frequency step phase locked
Output mode	CW and sweep
RF output connector	TypeVfemale
Related CW model	69077A
Related signal model	69277A
Related sweep signal model	69377A
Primary use	ultra low noise synthesized sweep 0.01 to 50 GHz Notes Specs from Anritsu/Wiltron 69A Series datasheet for 69×77A / 69177A (0.01–50 GHz Sweep). Series: 69000A CW, 69100A Sweep, 69200A Signal, 69300A Sweep/Signal.

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	
Technical Specifications	
PARAMETER	VALUE
Model	69177A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Synthesized Sweep Generator
Alias	69177A; Anritsu 69177A; Wiltron 69177A
Frequency range	10 MHz to 50 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
Internal time base aging Option 16	less than 5 x 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

PARAMETER	VALUE
Step attenuator option to 60 GHz	Option 2D 90 dB
Rack mount option	Option 1
Remote control	GPIB
Dimensions	429 mm W x 133 mm H x 597 mm D
Mass	less than or equal to 23 kg

Specifications

PARAMETER	VALUE
Model	69177A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Synthesized Sweep Generator
Alias	69177A; Anritsu 69177A; Wiltron 69177A
Frequency range	10 MHz to 50 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 11	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 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

PARAMETER	VALUE
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 mmWx 133 mmHx 597 mmDMass: less than or equal to 23 kg

Leveled output power 0.01 to less than 2 GHz class: +12 dBm
 Leveled output power 2 to 20 GHz class: +10 dBm
 Leveled output power greater than 20 to 40 GHz class: +2.5 dBm
 Leveled output power greater than 40 to 50 GHz class: +2.5 dBm
 Leveled output with step attenuator 0.01 to less than 2 GHz class: +10 dBm
 Leveled output with step attenuator 2 to 20 GHz class: +8.5 dBm
 Leveled output with step attenuator greater than 20 to 40 GHz class: 0 dBm
 Leveled output with step attenuator greater than 40 to 50 GHz class: -1 dBm

Specifications

PARAMETER	VALUE
Analog sweep width	1 MHz to full range
Analog sweep time	30 ms to 99 s
Step sweep	every frequency step phase locked
Output mode	CW and sweep
RF output connector	TypeVfemale
Related CW model	69077A
Related signal model	69277A
Related sweep signal model	69377A
Primary use	ultra low noise synthesized sweep 0.01 to 50 GHz

Notes
 Specs from Anritsu/Wiltron 69A Series datasheet for 69x77A / 69177A (0.01-50 GHz Sweep). Series: 69000A CW, 69100A Sweep, 69200A Signal, 69300A Sweep/Signal.

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.