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Data Sheet
August 13, 2026

ANRITSU

Anritsu 69165A Synthesized Sweep Generator, 0.5 to 40 GHz

Anritsu 69165A Synthesized Sweep Generator 0.5 to 40 GHz The Anritsu/Wiltron 69165A is a 69A Series synthesized sweep generator covering 0.5 GHz to 40 GHz. It provides analog, step, and manual sweeps with ultra-low-noise CW spectral purity for network analysis and swept ATE. Modulation is external/path limited versus 69200A/69300A signal models in the same suffix band. The Anritsu/Wiltron 69165A is a 69A Series synthesized sweep generator covering 0.5 GHz to 40 GHz. It provides analog, step, and manual sweeps with ultra-low-noise CW spectral purity for network analysis and swept ATE. Modulation is external/path limited versus 69200A/69300A signal models in the same suffix band.

MODEL Anritsu 69165A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 69165A	LISTING https://aumictechlabs.com/products/69165a-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 69165A Synthesized Sweep Generator delivers signal generation across 0.5 to 40 GHz for telecommunications, defense, and aerospace testing. This instrument combines synthesizer, sweep generator, and signal source functions into a single platform, enabling precise component and system validation across complex test environments.Technical Specifications Frequency Range: 0.5 GHz to 40 GHz Reference Output: 10 MHz reference signal at 0.5 V p-p into 50 Ω, AC coupled, via rear panel BNC connector. Sweep Capabilities: Independently selectable sweep width from 1 MHz to full range continuous sweep. Sweep speed reaches final frequency within 40 ms to ±1 kHz. Step sweep speed: less

than 15 ms + 1 ms/GHz step size or less than 40 ms, whichever is smaller. Dwell time per step variable from 1 ms to 99 seconds. Supports auto, external TTL, single, and reset trigger modes. Sweep Modes: Manual sweep, synthesized sweep, analog sweep, step frequency sweep, CW power sweep, alternate sweep, and master/slave sweep configurations. Modulation: Internal AM, FM, phase, and pulse modulation capabilities. User-downloadable complex modulation supported. Interface: IEEE-488 (GPIB) remote control standard. Supports SCPI and product-specific NATIVE command sets.Key Features Wide instantaneous bandwidth from 0.5 to 40 GHz eliminates multiple instruments Flexible sweep width selection independent of frequency range Fast sweep settling (40 ms across full span) minimizes test cycle time Multiple trigger modes enable seamless integration into automated test systems Integrated reference output for phase-coherent measurements Multi-mode sweep architecture (manual, synthesized, analog, step frequency, power sweep) accommodates diverse test requirementsTypical Applications Component characterization across microwave and millimeter-wave bands System validation in defense and aerospace platforms Telecommunications equipment testing Broadband filter and amplifier measurement Network analyzer source operationCompatibility & Integration GPIB interface enables direct integration with automated test systems and network analyzers. Command-line control via SCPI ensures compatibility with industry-standard test software.

Features & description

From manufacturer datasheet

Features

- Synthesized sweep coverage 0.5 to 40 GHz

Applications

- Swept frequency stimulus 0.5 to 40 GHz

69165A Characteristics / Specifications

PARAMETER	VALUE
Model	69165A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Synthesized Sweep Generator
Alias	69165A; Anritsu 69165A; Wiltron 69165A
Frequency range	0.5 GHz to 40 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 accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2 x 10^-8/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 40 GHz	Option 2B 110 dB
Rack mount option	Option 1
Remote control	GPIB
Leveled output power 0.5 to 2.2 GHz class	+13 dBm

PARAMETER	VALUE
Leveled output power greater than 2.2 to 20 GHz class	+13 dBm
Leveled output power greater than 20 to 40 GHz class	+6 dBm
Leveled output with step attenuator 0.5 to 2.2 GHz class	+11 dBm
Leveled output with step attenuator greater than 2.2 to 20 GHz class	+11 dBm
Leveled output with step attenuator greater than 20 to 40 GHz class	+3 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
Related CW model	69065A
Related signal model	69265A
Related sweep signal model	69365A
Primary use	ultra low noise synthesized sweep to 40 GHz Notes Specs from Anritsu/Wiltron 69A Series datasheet tables for 69x65A / 69165A (0.5–40 GHz Sweep). Series: 69000A CW, 69100A Sweep, 69200A Signal, 69300A Sweep/Signal. Confirm options and calibration label power.

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
Model	69165A
Manufacturer	Anritsu (Wiltron 69A Series)
Instrument Type	Synthesized Sweep Generator

Specifications

PARAMETER	VALUE
Alias	69165A; Anritsu 69165A; Wiltron 69165A
Frequency range	0.5 GHz to 40 GHz
Family	69A Series ultra low noise

Specifications

PARAMETER	VALUE
Output power resolution	0.01 dB
Source impedance	50 ohm nominal
Source SWR internal leveling below 2 GHz	less than 1.7 typical

Specifications

PARAMETER	VALUE
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

Specifications

PARAMETER	VALUE
Internal leveling	yes at output connector
RF on off	yes
Level offset	yes

Specifications

PARAMETER	VALUE
CW frequency resolution standard	1 kHz class
CW accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2 x 10^-8/day class

Specifications

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

Specifications

PARAMETER	VALUE
Step attenuator option to 40 GHz	Option 2B 110 dB
Rack mount option	Option 1
Remote control	GPIB

Leveled output power 0.5 to 2.2 GHz class: +13 dBm

Leveled output power greater than 2.2 to 20 GHz class: +13 dBm

Leveled output power greater than 20 to 40 GHz class: +6 dBm

Leveled output with step attenuator 0.5 to 2.2 GHz class: +11 dBm

Leveled output with step attenuator greater than 2.2 to 20 GHz class: +11 dBm

Leveled output with step attenuator greater than 20 to 40 GHz class: +3 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

Specifications

PARAMETER	VALUE
Output mode	CW and sweep
Related CW model	69065A
Related signal model	69265A

Related sweep signal model: 69365A

Primary use: ultra low noise synthesized sweep to 40 GHz

Notes

Specs from Anritsu/Wiltron 69A Series datasheet tables for 69x65A / 69165A (0.5–40 GHz Sweep). Series: 69000A CW, 69100A Sweep, 69200A Signal, 69300A Sweep/Signal. Confirm options and calibration label power.

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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