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Data Sheet

August 13, 2026

ANRITSU

Anritsu 68377B Synthesized Sweep/Signal Generator, 0.01 GHz to 50 GHz

Anritsu 68377B Synthesized Sweep/Signal Generator 10 MHz to 50 GHz The Anritsu 68377B is a synthesized sweep/signal generator covering 0.01 GHz to 50 GHz in the earlier 68000B synthesizer family. It combines CW, analog/step sweep, and comprehensive modulation at moderate cost relative to the ultra-low-noise 69A/69B lines, for broadband signal simulation and swept measurements to 50 GHz. The Anritsu 68377B is a synthesized sweep/signal generator covering 0.01 GHz to 50 GHz in the earlier 68000B synthesizer family. It combines CW, analog/step sweep, and comprehensive modulation at moderate cost relative to the ultra-low-noise 69A/69B lines, for broadband signal simulation and swept measurements to 50 GHz.



MODEL

Anritsu 68377B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

68377B

LISTING

<https://aumictechlabs.com/products/68377b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu 68377B is a synthesized sweep/signal generator delivering stable, accurate RF signal generation from 0.01 GHz to 50 GHz. Built for demanding test environments, it combines ultra-low phase noise performance with flexible sweep architecture and advanced modulation capabilities. The instrument supports analog sweep, step sweep with phase locking, and manual sweep modes, each with independently selectable width from 1 kHz to full range. Twenty presettable CW frequencies (F0–F9, M0–M9) with 1 kHz resolution enable rapid frequency switching in under 40 ms typical. Output power ranges from +12 dBm at low frequencies to +2.5 dBm at 50 GHz, with optional step attenuator for refined power

control. Phase noise measures -100 dBc at 10 kHz offset from 10 GHz. The generator integrates AM, FM, and pulse modulation with internal waveform generators supporting Gaussian noise and arbitrary user-defined signals. Pulse modes include doublet, triplet, and quadruplet configurations for RADAR testing. Spurious performance reaches -60 dBc above 2 GHz to 20 GHz. An internal or external 10 MHz time base maintains frequency accuracy, with optional ovenized crystal oscillator available for enhanced stability.

Technical Specifications

Frequency Range: 0.01 GHz to 50 GHz CW Frequency Resolution: 1 kHz (0.1 Hz with Option 11) Output Power: +12 dBm (0.01–2.0 GHz), +10 dBm (2.0–20.0 GHz), +2.5 dBm (20.0–50.0 GHz) Phase Noise: -100 dBc/Hz @ 10 kHz offset from 10 GHz Harmonic Spurious: -30 dBc (10–50 MHz), -40 dBc (>50 MHz to 2 GHz), -60 dBc (>2 GHz to 20 GHz), -40 dBc (>20 GHz to 40 GHz) Sweep Dwell Time: 1 ms to 99 seconds per step Frequency Switching Time: <15 ms + 1 ms/GHz step, or typically <40 ms Power Level Flatness (Analog Sweep): 2.0 dB typical (0.05–20 GHz)

Key Features Analog, step (phase-locked), and manual sweep modes with alternate range capability AM, FM, pulse modulation with internal generators producing seven waveforms Pulse doublet, triplet, quadruplet output for RADAR blind spot testing Phase modulation option and complex modulation support Step attenuator option for extended power range control Internal or external 10 MHz time base; optional ovenized oscillator

Typical Applications RF component characterization and validation System-level verification across extended frequency bands High-volume manufacturing test automation RADAR signal simulation and testing

Compatibility & Integration Remote programmability enables integration into automated test systems. Presettable frequencies and simultaneous synchronized modulations support complex signal scenarios in production environments.

Features & description

From manufacturer datasheet

Features

• Coverage 0.01 to 50 GHz • Analog and phase-locked step sweep • Internal/external AM, FM, pulse; optional Φ M • 68B family excellent phase noise at moderate cost • List sweep with large frequency/power tables • Optional 0.1 Hz resolution and high-stability time base • GPIB remote control • Upgradeable 68B platform toward later 68C/69B

Applications

• Broadband swept network analysis to 50 GHz • AM/FM/pulse modulated signal simulation • ATE microwave/mmWave stimulus • Radar and EW receiver testing • CW LO use when modulation and sweep are idle

68377B Characteristics / Specifications

PARAMETER	VALUE
Model	68377B
Manufacturer	Anritsu
Instrument Type	Synthesized Sweep/Signal Generator
Alias	68377B; Anritsu 68377B
Frequency range	0.01 GHz to 50 GHz
Family	68000B synthesizers
Leveled power 0.01 to less than 2 GHz	+12 dBm
Leveled power 2 to 20 GHz	+10 dBm
Leveled power greater than 20 to 40 GHz	+2.5 dBm
Leveled power greater than 40 to 50 GHz	+2.5 dBm
Leveled power with step attenuator 0.01 to less than 2 GHz	+10 dBm
Leveled power with step attenuator 2 to 20 GHz	+8.5 dBm
Leveled power with step attenuator greater than 20 to 40 GHz	0 dBm
Leveled power with step attenuator greater than 40 to 50 GHz	-1 dBm
Output power resolution	0.01 dB
Frequency resolution standard	1 kHz
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
Internal time base aging Option	less than 5×10^{-10} /day
Analog sweep width	1 MHz to full range
Analog sweep time	30 ms to 99 s
Step sweep steps	1 to 10000

PARAMETER	VALUE
List sweep points	up to 2000 per table
Minimum leveled power without attenuator	to -15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	to -115 dBm class
SSB phase noise	68B family excellent moderate cost class
Remote control	GPIB
Dimensions	133 mmHx 429 mmWx 597 mmDMass: less than or equal to 23 kg
RF output connector	TypeVfemale
Related CW 69A	69077A
Related ultra low noise sweep signal	69377A
Related Crevision	68377C Notes Specs from Anritsu/Wiltron 68B/69A Series frequency charts and 68xxxB performance tables for 68x77B / 68377B (0.01–50 GHz). Confirm options and leveled power on the unit.

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	
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PARAMETER	VALUE
Output power resolution	0.01 dB
Frequency resolution standard	1 kHz
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
Internal time base aging Option 16	less than 5 x 10 ⁻¹⁰ /day
Analog sweep width	1 MHz to full range
Analog sweep time	30 ms to 99 s
Step sweep steps	1 to 10000
List sweep points	up to 2000 per table
Minimum leveled power without attenuator	to -15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	to -115 dBm class
SSB phase noise	68B family excellent moderate cost class
Remote control	GPIB
Dimensions	133 mm H x 429 mm W x 597 mm D
Mass	less than or equal to 23 kg
RF output connector	Type V female
Related CW 69A	69077A
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PARAMETER	VALUE
Model	68377B
Manufacturer	Anritsu
Instrument Type	Synthesized Sweep/Signal Generator

PARAMETER	VALUE
Alias	68377B; Anritsu 68377B
Frequency range	0.01 GHz to 50 GHz
Family	68000B synthesizers

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

Specifications

PARAMETER	VALUE
Output power resolution	0.01 dB
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Minimum leveled power with attenuator	to -115 dBm class
SSB phase noise	68B family excellent moderate cost class
Remote control	GPIO
Dimensions	133 mmHx 429 mmWx 597 mmDMass: less than or equal to 23 kg
RF output connector	TypeVfemale
Related CW 69A	69077A
Related ultra low noise sweep signal	69377A
RelatedCrevision	68377C

Notes

Specs from Anritsu/Wiltron 68B/69A Series frequency charts and 68xxxB performance tables for 68x77B / 68377B (0.01-50 GHz). 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

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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.