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Data Sheet

August 13, 2026

ANRITSU

Anritsu 68397C Synthesized High Performance Signal Generator, 10 MHz to 65 GHz

Anritsu 68397C Synthesized High Performance Signal Generator 10 MHz to 65 GHz The Anritsu 68397C is a synthesized high-performance signal generator covering 10 MHz to 65 GHz in the 68000C/69000B family. It provides CW, step/list/analog sweep, and internal AM/FM/phase/pulse modulation for broadband microwave and millimeter-wave signal simulation. It is the 68XXXC high-performance counterpart to ultra-low-noise 69397B in the same frequency band. The Anritsu 68397C is a synthesized high-performance signal generator covering 10 MHz to 65 GHz in the 68000C/69000B family. It provides CW, step/list/analog sweep, and internal AM/FM/phase/pulse modulation for broadband microwave and millimeter-wave signal simulation. It is the 68XXXC high-performance counterpart to ultra-low-noise 69397B in the same frequency band.



MODEL

Anritsu 68397C

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

68397C

LISTING

<https://aumictechlabs.com/products/68397c-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu 68397C is a synthesized signal generator delivering exceptional RF and microwave performance across 10 MHz to 65 GHz. Purpose-built for demanding applications including advanced communications, radar, and electronic warfare testing, the instrument combines extremely low phase noise with suppressed harmonics and minimized spurious outputs.

Frequency resolution reaches 0.1 Hz minimum, while fine-step level control and wide dynamic power range enable precise signal generation across the full band. Rapid frequency and amplitude switching accelerate automated test sequences, and GPIB remote control integration supports seamless incorporation into production and development environments.

Technical Specifications

Frequency Range: 10 MHz to 65 GHz
Frequency Resolution: 0.1 Hz minimum
Output Impedance: 50 Ohms AC
Input Power: 100–240 VAC, 50/60 Hz
Phase Noise: Extremely low across frequency offsets; performance varies with carrier frequency and measurement offset
Harmonics: Suppressed to very low levels
Non-Harmonic Spurious: Minimized to meet stringent measurement requirements
Power Level Flatness: High flatness maintained across operating frequency range
Level Accuracy: High across the frequency band for repeatable measurements
Level Resolution: Fine step control for precise power setting

Key Features

Fast frequency switching with settling time dependent on step size
Rapid amplitude switching for dynamic test scenarios
Excellent SSB phase noise and low spurious signal performance
Internal modulation sources supporting AM, FM, PM, and pulse modulation
Digital modulation capability for complex formats including QAM and PSK
Modulation bandwidth support for varied application requirements
Wide dynamic output power range from low to higher signal levels

Typical Applications

Advanced communication system development and verification
Radar system testing and characterization
Electronic warfare receiver and transmitter validation
High-order modulation scheme testing
Sensitive receiver measurements

Compatibility & Integration

GPIB (IEEE 488.2) remote control for automated test system integration

Features & description

From manufacturer datasheet

Features

- Broadest family coverage 10 MHz to 65 GHz in one coax output class

Applications

- Broadband CW and modulated stimulus 0.01 to 65 GHz

68397C Characteristics / Specifications

PARAMETER	VALUE
Model	68397C
Manufacturer	Anritsu
Instrument Type	Synthesized High Performance Signal Generator
Alias	68397C; Anritsu 68397C
Frequency range	10 MHz to 65 GHz
Family	68000C / 69000B synthesizers
Leveled output power 0.01 to less than 2 GHz class	+12.0 dBm
Leveled output power 2 to 20 GHz class	+10.0 dBm
Leveled output power greater than 20 to 40 GHz class	+2.5 dBm
Leveled output power greater than 40 to 50 GHz class	0.0 dBm
Leveled output power greater than 50 to 65 GHz class	-2.0 dBm
Minimum leveled power without attenuator	to -20 dBm
Minimum leveled power with attenuator	to -120 dBm
Output power resolution	0.01 dB or 0.001 mV
CW frequency resolution standard	1 kHz
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
Internal time base aging Option	less than 5×10^{-10} /day
SSB phase noise 68XXXC 2 to 6 GHz at 10 kHz	-86 dBc/Hz
SSB phase noise 68XXXC greater than 10 to 20 GHz at 10 kHz	-78 dBc/Hz

PARAMETER	VALUE
SSB phase noise 68XXXC greater than 20 to 40 GHz at 10 kHz	-72 dBc/Hz
SSB phase noise 68XXXC greater than 40 to 65 GHz at 10 kHz	-64 dBc/Hz
Harmonics 2 to 65 GHz class	-60 dBc
Nonharmonic spurious 2 to 65 GHz	-60 dBc
Analog sweep width	1 MHz to full range
Analog sweep time	30 ms to 99 s
List sweep points	up to 2000 non sequential frequency/power sets
Pulse PRF leveled	100 Hz to 5 MHz class
Switching time without attenuator change	less than 3 ms typical
DimensionsHxWxD	133 mm x 429 mm x 597 mm
Mass	less than or equal to 23 kg
Remote control	GPIB
Related ultra low noise model	69397B
Related CW model	68097C Notes Specs from Anritsu 69000B/68000C Series datasheet for 68×97C / 68397C (10 MHz–65 GHz High Performance Signal). Confirm installed options (attenuator, Option 11/15/16/22), exact max leveled power on the calibration label, and Vconnector condition 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.

Performance Signal Generator 10 MHz to 65 GHz

Overview

The Anritsu 68397C is a synthesized high-performance signal generator covering 10 MHz to 65 GHz in the 68000C/69000B family. It provides CW, step/list/analog sweep, and internal AM/FM/phase/pulse modulation for broadband microwave and millimeter-wave signal simulation. It is the 68XXXC high-performance counterpart to ultra-low-noise 69397B in the same frequency band.

Applications

- Broadband CW and modulated stimulus 0.01 to 65 GHz
- Radar pulse, multi pulse, and swept delay simulation
- mmWave component and system characterization
- High performance ATE source with GPIB
- Analog and phase locked step frequency sweeps

Key Features

- Broadest family coverage 10 MHz to 65 GHz in one coax output class
- Internal AM, FM, phase, and pulse modulation generators
- Analog, step, alternate, power, and list sweeps
- Optional 0.1 Hz resolution Option 11 and high stability Option 16
- Optional high power Option 15 where available by band
- Optional Option 22 audio band 0.1 Hz to 10 MHz
- Compact 13.3 cm rack height synthesizer family
- GPIB remote control

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	68397C
Manufacturer	Anritsu
Instrument Type	Synthesized High Performance Signal Generator

Specifications

PARAMETER	VALUE
Alias	68397C; Anritsu 68397C
Frequency range	10 MHz to 65 GHz
Family	68000C / 69000B synthesizers

Leveled output power 0.01 to less than 2 GHz class: +12.0 dBm

Leveled output power 2 to 20 GHz class: +10.0 dBm

Leveled output power greater than 20 to 40 GHz class: +2.5 dBm

Leveled output power greater than 40 to 50 GHz class: 0.0 dBm
Leveled output power greater than 50 to 65 GHz class: -2.0 dBm

Specifications

PARAMETER	VALUE
Minimum leveled power without attenuator	to -20 dBm
Minimum leveled power with attenuator	to -120 dBm
Output power resolution	0.01 dB or 0.001 mV

Specifications

PARAMETER	VALUE
CW frequency resolution standard	1 kHz
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
Internal time base aging Option 16: less than 5×10^{-10} /day
SSB phase noise 68XXXC 2 to 6 GHz at 10 kHz: -86 dBc/Hz
SSB phase noise 68XXXC greater than 10 to 20 GHz at 10 kHz: -78 dBc/Hz
SSB phase noise 68XXXC greater than 20 to 40 GHz at 10 kHz: -72 dBc/Hz
SSB phase noise 68XXXC greater than 40 to 65 GHz at 10 kHz: -64 dBc/Hz

Specifications

PARAMETER	VALUE
Harmonics 2 to 65 GHz class	-60 dBc
Nonharmonic spurious 2 to 65 GHz	-60 dBc
Analog sweep width	1 MHz to full range

Specifications

PARAMETER	VALUE
Analog sweep time	30 ms to 99 s
List sweep points	up to 2000 non sequential frequency/power sets
Pulse PRF leveled	100 Hz to 5 MHz class

Specifications

PARAMETER	VALUE
Switching time without attenuator change	less than 3 ms typical
DimensionsHxWxD	133 mm x 429 mm x 597 mm

PARAMETER	VALUE
Mass	less than or equal to 23 kg

Specifications

PARAMETER	VALUE
Remote control	GPIO
Related ultra low noise model	69397B
Related CW model	68097C

Notes

Specs from Anritsu 69000B/68000C Series datasheet for 68x97C / 68397C (10 MHz-65 GHz High Performance Signal). Confirm installed options (attenuator, Option 11/15/16/22), exact max leveled power on the calibration label, andVconnector condition 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

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.