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Data Sheet

August 13, 2026

ANRITSU

Anritsu 68317C Synthesized High Performance Signal Generator, 0.01 â€" 8.4 GHz

Anritsu 68317C High Performance Synthesized Signal Generator 10 MHz to 8.4 GHz The Anritsu 68317C is a high-performance synthesized signal generator covering 10 MHz to 8.4 GHz in the 68300C family. It combines CW, analog/digital sweep, and comprehensive internal/external AM, FM, pulse, and optional phase modulation for complex signal simulation, with ultra-low SSB phase noise relative to the 68C platform and GPIB control. The Anritsu 68317C is a high-performance synthesized signal generator covering 10 MHz to 8.4 GHz in the 68300C family. It combines CW, analog/digital sweep, and comprehensive internal/external AM, FM, pulse, and optional phase modulation for complex signal simulation, with ultra-low SSB phase noise relative to the 68C platform and GPIB control.



MODEL

Anritsu 68317C

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

68317C

LISTING

<https://aumictechlabs.com/products/68317c-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu 68317C is a synthesized signal generator delivering precise RF and microwave test signals across 0.01 GHz to 8.4 GHz. Built for development and production testing of RF/microwave components and systems, it combines signal purity, accurate power control, and rapid frequency agility in a compact, programmable platform. Technical Specifications Frequency Range: 0.01 GHz to 8.4 GHz Output Power: +13.0 dBm to +11.0 dBm (varies by frequency band). Leveled output

available to -115 dBm in 0.01 dB steps. Phase Noise: -78 dBc/Hz typical (≥ 2 GHz to ≤ 6 GHz); -66 dBc/Hz typical (> 8.4 GHz to ≤ 20 GHz). Output Level Accuracy: ± 0.5 dB absolute; ± 0.2 dB linearity (typical). Reference Oscillators: Standard aging $\pm 1 \times 10^{-6}$ /year, $\pm 1 \times 10^{-7}$ /day. High Stability option (Option 002): $\pm 1 \times 10^{-7}$ /year, $\pm 1 \times 10^{-8}$ /day. Rubidium option (Option 001): $\pm 1 \times 10^{-10}$ /month. Sweep Modes: Linear/log sweep, step sweep, alternate sweep. Sweep time 30 ms to 99 seconds. Step sweep rates: 1 ms/step to 99 seconds/step (variable after lock); 20 ms/step to 99 seconds/step (fixed rate, lock time included). Sweep width 1 kHz to full instrument range. Key Features AM, FM, and Pulse Modulation support with synchronized multi-modulation capability Arbitrary user-defined modulation waveforms Fast tuning for rapid frequency changes Receiver sensitivity measurements to -115 dBm with 0.01 dB resolution Typical Applications RF and microwave component characterization and validation Production testing of complex RF systems Development environments requiring precision signal generation and frequency agility Compatibility & Integration GPIB, Ethernet, and USB interfaces enable remote control and automated test sequences. Compact design accommodates laboratory and production test benches.

Features & description

From manufacturer datasheet

Features

- Frequency coverage 10 MHz to 8.4 GHz (Option 22 to 0.1 Hz)
- Full internal AM FM pulse and optional phase modulation
- Internal modulation generators with seven waveforms
- Digital and analog sweep with less than 5 ms step switching
- Optional 0.1 Hz resolution and high-stability time base
- Compact 13.3 cm rack height with GPIB

Applications

- Complex modulated signal simulation to 8.4 GHz
- Receiver and radar moving-target pulse delay tests
- ATE stimulus with list mode and fast switching
- Low-phase-noise LO and clock applications in this band

High power Option 15 capability family: +17 dBm class to 20 GHz models

Minimum leveled power without attenuator: -15 dBm (-20 dBm typical) Minimum leveled power with attenuator: -120 dBm Minimum leveled power with electronic attenuator: -140 dBm Output power resolution: 0.01 dB or 0.001 mV CW frequency resolution standard: 1 kHz CW frequency resolution Option 11: 0.1 Hz 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 10 MHz to 2 GHz at 10 kHz: -86 dBc/Hz SSB phase noise 68XXXC 2 to 6 GHz at 10 kHz: -86 dBc/Hz SSB phase noise 68XXXC greater than 6 to 8.4 GHz at 10 kHz: -83 dBc/Hz AM depth: 0 to 90 percent log or linear DC to 100 kHz rates FM deviation modes: up to 10 MHz at 8 MHz rates or 100 MHz at 100 Hz rates Pulse PRF: DC to 10 MHz unleveled 100 Hz to 5 MHz leveled Phase modulation Option 6: up to 400 radians at 1 MHz rates Remote control: IEEE 488 GPIB Dimensions: 133 mmHx 429 mmWx 597 mmDWeight: 23 kg maximum Related CW model: 68017C Related signal model: 68117C Related ultra low noise: 69317B Notes Specs from Anritsu 68000C/69000B Series datasheet for 68×17C / 68317C (0.01–8.4 GHz). Confirm modulation options (6, 20 AM SCAN), attenuator, and Option 11/15/16/22 on the unit.

68317C Characteristics / Specifications

PARAMETER	VALUE
Model	68317C
Manufacturer	Anritsu
Instrument Type	High Performance Synthesized Signal Generator
Alias	68317C; Anritsu 68317C
Frequency range standard	10 MHz to 8.4 GHz
Frequency extension Option	0.1 Hz to 10 MHz
Family	68300C Series
Leveled output power 0.01 to 8.4 GHz	+13 dBm
Leveled output with step attenuator 0.01 to 8.4 GHz	+11 dBm
Leveled output with electronic attenuator 0.01 to 8.4 GHz	+9 dBm
High power Option 15 capability family	+17 dBm class to 20 GHz models
Minimum leveled power without attenuator	-15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	-120 dBm
Minimum leveled power with electronic attenuator	-140 dBm
Output power resolution	0.01 dB or 0.001 mV
CW frequency resolution standard	1 kHz
CW frequency resolution Option	0.1 Hz
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 10 MHz to 2 GHz at 10 kHz	-86 dBc/Hz
SSB phase noise 68XXXC 2 to 6 GHz at 10 kHz	-86 dBc/Hz

PARAMETER	VALUE
SSB phase noise 68XXXC greater than 6 to 8.4 GHz at 10 kHz	-83 dBc/Hz
AM depth	0 to 90 percent log or linear DC to 100 kHz rates
FM deviation modes	up to 10 MHz at 8 MHz rates or 100 MHz at 100 Hz rates
Pulse PRF	DC to 10 MHz unleveled 100 Hz to 5 MHz leveled
Phase modulation Option	up to 400 radians at 1 MHz rates
Remote control	IEEE 488 GPIB
Dimensions	133 mmHx 429 mmWx 597 mmDWeight: 23 kg maximum
Related CW model	68017C
Related signal model	68117C
Related ultra low noise	69317B Notes Specs from Anritsu 68000C/69000B Series datasheet for 68×17C / 68317C (0.01–8.4 GHz). Confirm modulation options (6, 20 AM SCAN), attenuator, and Option 11/15/16/22 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 Synthesized Signal Generator 10 MHz to 8.4 GHz

Overview

The Anritsu 68317C is a high-performance synthesized signal generator covering 10 MHz to 8.4 GHz in the 68300C family. It combines CW, analog/digital sweep, and comprehensive internal/external AM, FM, pulse, and optional phase modulation for complex signal simulation, with ultra-low SSB phase noise relative to the 68C platform and GPIB control.

Applications

- Complex modulated signal simulation to 8.4 GHz
- Receiver and radar moving-target pulse delay tests
- ATE stimulus with list mode and fast switching
- Low-phase-noise LO and clock applications in this band

Key Features

- Frequency coverage 10 MHz to 8.4 GHz (Option 22 to 0.1 Hz)
- Full internal AM FM pulse and optional phase modulation
- Internal modulation generators with seven waveforms
- Digital and analog sweep with less than 5 ms step switching
- Optional 0.1 Hz resolution and high-stability time base
- Compact 13.3 cm rack height with GPIB

Technical Specifications

Specifications

PARAMETER	VALUE
AM depth	0 to 90 percent log or linear DC to 100 kHz rates
FM deviation modes	up to 10 MHz at 8 MHz rates or 100 MHz at 100 Hz rates
Pulse PRF	DC to 10 MHz unlevelled 100 Hz to 5 MHz levelled
Phase modulation Option 6	up to 400 radians at 1 MHz rates
Remote control	IEEE 488 GPIB
Dimensions	133 mm H x 429 mm W x 597 mm D
Weight	23 kg maximum
Related CW model	68017C
Related signal model	68117C
Related ultra low noise	69317B

Technical Specifications

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Manufacturer	Anritsu
Instrument Type	High Performance Synthesized Signal Generator

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Alias	68317C; Anritsu 68317C
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Frequency extension Option 22	0.1 Hz to 10 MHz
Family	68300C Series
Leveled output power 0.01 to 8.4 GHz	+13 dBm

Leveled output with step attenuator 0.01 to 8.4 GHz: +11 dBm
Leveled output with electronic attenuator 0.01 to 8.4 GHz: +9 dBm

Specifications

PARAMETER	VALUE
High power Option 15 capability family	+17 dBm class to 20 GHz models
Minimum leveled power without attenuator	-15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	-120 dBm
Minimum leveled power with electronic attenuator	-140 dBm
Output power resolution	0.01 dB or 0.001 mV
CW frequency resolution standard	1 kHz
CW frequency resolution Option 11	0.1 Hz
Internal time base aging	less than 2 x 10 ⁻⁸ /day
Internal time base aging Option 16	less than 5 x 10 ⁻¹⁰ /day

SSB phase noise 68XXXC 10 MHz to 2 GHz at 10 kHz: -86 dBc/Hz
SSB phase noise 68XXXC 2 to 6 GHz at 10 kHz: -86 dBc/Hz
SSB phase noise 68XXXC greater than 6 to 8.4 GHz at 10 kHz: -83 dBc/Hz

Specifications

PARAMETER	VALUE
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Notes

Specs from Anritsu 68000C/69000B Series datasheet for 68x17C / 68317C (0.01-8.4 GHz). Confirm modulation options (6, 20 AM SCAN), attenuator, and Option 11/15/16/22 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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.