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Data Sheet

August 13, 2026

ANRITSU

Anritsu 68117C Synthesized Signal Generator, 0.01 to 8.4 GHz

Anritsu 68117C Synthesized Signal Generator 10 MHz to 8.4 GHz The Anritsu 68117C is a synthesized signal generator covering 10 MHz to 8.4 GHz in the 68100C family. It provides analog sweep, external modulation, digital frequency/power sweep, and GPIB control for network-analysis sources and ATE in the 2–8.4 GHz microwave band, sharing 68×17C leveled-power tables with related CW and high-performance models. The Anritsu 68117C is a synthesized signal generator covering 10 MHz to 8.4 GHz in the 68100C family. It provides analog sweep, external modulation, digital frequency/power sweep, and GPIB control for network-analysis sources and ATE in the 2–8.4 GHz microwave band, sharing 68×17C leveled-power tables with related CW and high-performance models.



MODEL

Anritsu 68117C

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

68117C

LISTING

<https://aumictechlabs.com/products/68117c-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 68117C is a synthesized signal generator spanning 0.01 GHz to 8.4 GHz, designed for wireless, radar, and communication system test and measurement. It delivers fast frequency switching in automated test equipment and benchtop environments, with output power ranging from –125 dBm to +17 dBm and ultra-low phase noise performance. The instrument executes step sweeps across 1 to 10,000 steps with dwell times from 1 ms to 99 seconds per step, supporting

list sweep storage of up to 2000 non-volatile points. Internal modulation generators provide seven waveforms including Gaussian noise, arbitrary waveforms, and pulse modulation with doublet, triplet, or quadruplet capability for radar blind spot testing. Oven-stabilized frequency reference maintains $<5 \times 10^{-10}$ per day stability. A compact 13.3 cm form factor optimizes ATE rack density while remote interface capability enables seamless test system integration.

Technical Specifications

Frequency Range: 0.01 GHz to 8.4 GHz Output Power: Maximum +17 dBm; leveled output -120 dBm in 0.01 dB steps; minimum power -125 dBm Phase Noise: -107 dBc SSB at 10 kHz offset Frequency Stability: $<5 \times 10^{-10}$ per day (oven-stabilized reference) Frequency Resolution: 1 kHz standard; 0.1 Hz with Option 11 Switching Speed: 5 ms typical; $<15 \text{ ms} + 1 \text{ ms/GHz}$ or $<40 \text{ ms}$ maximum for step sweep

Key Features

Step sweep with variable steps (1 to 10,000), 1 kHz to full-range step sizes, dwell times 1 ms to 99 seconds per step List sweep: 1000 frequencies in volatile memory, 2000-point table in non-volatile memory Alternate sweep mode between two ranges with independent power level assignment Manual sweep with user-selectable steps or step size Seven internal modulation waveforms plus user-defined arbitrary waveforms Pulse modulation with doublet, triplet, quadruplet, and swept delay for target simulation Simultaneous synchronized modulations for complex signal generation

Typical Applications

Automated test equipment for wireless and communication systems Radar system characterization and blind spot testing ATE rack integration with optimized compact footprint

Compatibility & Integration

Remote interface support enables straightforward integration into multi-instrument test setups. Part of the Anritsu 68C/69B series.

Features & description

From manufacturer datasheet

Features

• Frequency coverage 10 MHz to 8.4 GHz • Analog sweep plus digital frequency and power sweep • External AM and FM modulation • Less than 5 ms switching for less than 100 MHz steps • Optional attenuator and Option 15 high power • IEEE-488 GPIB remote control

Applications

• Swept microwave stimulus 10 MHz to 8.4 GHz • External AM/FM LO and component testing • ATE with fast switching and list mode • Network analyzer source substitution in this band

High power Option 15 family: +17 dBm class on applicable bands

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 Harmonics: -60 dBc typical family Nonharmonic spurious: -60 dBc Sweep step switching less than 100 MHz: less than 5 ms Remote control: IEEE 488 GPIB Dimensions: 133 mmHx 429 mmWx 597 mmDWeight: 23 kg maximum Related CW model: 68017C Related high performance signal: 68317C Related ultra low noise: 69117B Notes Specs from Anritsu 68000C/69000B Series datasheet for 68×17C / 68117C (0.01–8.4 GHz). Confirm Option 11/15/16/22 and attenuator type on the unit.

68117C Characteristics / Specifications

PARAMETER	VALUE
Model	68117C
Manufacturer	Anritsu
Instrument Type	Synthesized Signal Generator
Alias	68117C; Anritsu 68117C
Frequency range standard	10 MHz to 8.4 GHz
Frequency extension Option	0.1 Hz to 10 MHz
Family	68100C 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 family	+17 dBm class on applicable bands
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
Harmonics	-60 dBc typical family
Nonharmonic spurious	-60 dBc
Sweep step switching less than 100 MHz	less than 5 ms
Remote control	IEEE 488 GPIB
Dimensions	133 mmHx 429 mmWx 597 mmDWeight: 23 kg maximum
Related CW model	68017C
Related high performance signal	68317C
Related ultra low noise	69117B Notes Specs from Anritsu 68000C/69000B Series datasheet for 68×17C / 68117C (0.01–8.4 GHz). Confirm Option 11/15/16/22 and attenuator type 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 models.

Applications

- Swept microwave stimulus 10 MHz to 8.4 GHz
- External AM/FM LO and component testing
- ATE with fast switching and list mode
- Network analyzer source substitution in this band

Key Features

- Frequency coverage 10 MHz to 8.4 GHz
- Analog sweep plus digital frequency and power sweep
- External AM and FM modulation
- Less than 5 ms switching for less than 100 MHz steps
- Optional attenuator and Option 15 high power
- IEEE-488 GPIB remote control

Technical Specifications

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Model	68117C
Manufacturer	Anritsu
Instrument Type	Synthesized Signal Generator
Alias	68117C; Anritsu 68117C
Frequency range standard	10 MHz to 8.4 GHz
Frequency extension Option 22	0.1 Hz to 10 MHz
Family	68100C 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 family	+17 dBm class on applicable bands
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

PARAMETER	VALUE
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 68XXC 10 MHz to 2 GHz at 10 kHz: -86 dBc/Hz

SSB phase noise 68XXC 2 to 6 GHz at 10 kHz: -86 dBc/Hz

SSB phase noise 68XXC greater than 6 to 8.4 GHz at 10 kHz: -83 dBc/Hz

Specifications

PARAMETER	VALUE
Harmonics	-60 dBc typical family
Nonharmonic spurious	-60 dBc
Sweep step switching less than 100 MHz	less than 5 ms
Remote control	IEEE 488 GPIB
Dimensions	133 mmHx 429 mmWx 597 mmDWeight: 23 kg maximum
Related CW model	68017C
Related high performance signal	68317C
Related ultra low noise	69117B

Notes

Specs from Anritsu 68000C/69000B Series datasheet for 68x17C / 68117C (0.01–8.4 GHz). Confirm Option 11/15/16/22 and attenuator type 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.