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Data Sheet
August 13, 2026

ANRITSU

Anritsu 68147C Synthesized Signal Generator, 10 MHz â€“ 20 GHz

Anritsu 68147C Synthesized Signal Generator 10 MHz to 20 GHz The Anritsu 68147C isasynthesized signal generator covering 10 MHz to 20 GHz in the 68000C/68100C family. It adds analog sweep and external modulation capability to the CW 68047C architecture, with digital frequency/power sweep, wide dynamic range, and GPIB control for network analysis and ATE stimulus. The Anritsu 68147C isasynthesized signal generator covering 10 MHz to 20 GHz in the 68000C/68100C family. It adds analog sweep and external modulation capability to the CW 68047C architecture, with digital frequency/power sweep, wide dynamic range, and GPIB control for network analysis and ATE stimulus.

MODEL **Anritsu 68147C**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **68147C**	LISTING **https://aumictechlabs.com/products/68147c-2/**

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

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 68147C is a synthesized signal generator engineered for automatic test equipment (ATE) applications across 10 MHz to 20 GHz. It delivers excellent signal purity, fast output agility, and stable performance in wireless, aerospace, and military test environments. The instrument provides +17 dBm guaranteed leveled power to 20 GHz and extends down to –140 dBm with electronic attenuation, supporting both continuous wave and modulated signal generation with 0.1 Hz frequency resolution.Technical Specifications Frequency Range: 10 MHz to 20 GHz Output

Power: +17 dBm guaranteed leveled power to 20 GHz; –125 dBm minimum power; –140 dBm with electronic attenuator Frequency Resolution: 0.1 Hz Phase Noise: –107 dBc at 10 kHz offset from 10 GHz (SSB) Spurious Levels: ←60 dBc Switching Time: <5 ms for <100 MHz sweep steps Power Sweep Resolution: 0.01 dBKey Features Modulation support: AM, FM, external FM (locked/unlocked), external AM (log/linear), internal pulse modulation, and user-downloaded arbitrary waveforms Multiple sweep modes: analog sweep, digital frequency sweep, digital power sweep, step sweep (1 ms to 99 seconds per step), fixed-rate step sweep, alternate sweep, manual sweep, and list sweep (up to 4 tables with 2000 non-sequential frequency/power sets) Intuitive menu-driven front panel with GPIB (IEEE 488) interface and optional SCPI programmability Compact design minimizing rack space while maintaining high output power for ATE system integrationTypical Applications Local oscillator (LO) duty in receiver and transmitter test systems Network analysis and frequency-dependent device characterization Continuous wave signal generation for component validation Multi-tone and modulated signal scenarios requiring fast frequency agilityCompatibility & Integration GPIB control enables seamless integration into existing ATE architectures. Master/slave capability supports synchronized multi-instrument configurations.

Features & description

From manufacturer datasheet

Features

• Frequency coverage 10 MHz to 20 GHz (Option 22 to 0.1 Hz) • 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 to -120 dBm and Option 15 high power • IEEE-488 GPIB and optional SCPI

Applications

• Swept and CW microwave stimulus 10 MHz to 20 GHz • External AM/FM modulated LO and receiver testing • ATE racks needing fast switching and list mode • Scalar/vector network analyzer source substitution

High power Option 15 2 to 20 GHz: +17 dBm

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 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 Harmonics 2 to 20 GHz: -60 dBc 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: 68047C Related high performance signal: 68347C Related ultra low noise: 69147B Notes Specs from Anritsu 68000C/69000B Series datasheet for 68×47C / 68147C (0.01–20 GHz). Confirm attenuator type and Option 11/15/16/22 on the unit.

68147C Characteristics / Specifications

PARAMETER	VALUE
Model	68147C
Manufacturer	Anritsu
Instrument Type	Synthesized Signal Generator
Alias	68147C; Anritsu 68147C
Frequency range standard	10 MHz to 20 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 power greater than 8.4 to 20 GHz	+13 dBm
Leveled output with step attenuator 0.01 to 8.4 GHz	+11 dBm
Leveled output with step attenuator greater than 8.4 to 20 GHz	+11 dBm
Leveled output with electronic attenuator 0.01 to 8.4 GHz	+9 dBm
Leveled output with electronic attenuator greater than 8.4 to 20 GHz	+3 dBm
High power Option 15 2 to 20 GHz	+17 dBm
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

PARAMETER	VALUE
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
Harmonics 2 to 20 GHz	-60 dBc
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	68047C
Related high performance signal	68347C
Related ultra low noise	69147B Notes Specs from Anritsu 68000C/69000B Series datasheet for 68×47C / 68147C (0.01–20 GHz). Confirm attenuator type 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.

Specifications

Specifications

PARAMETER	VALUE
Harmonics 2 to 20 GHz	-60 dBc
Nonharmonic spurious	-60 dBc
Sweep step switching less than 100 MHz	less than 5 ms
Remote control	IEEE 488 GPIB
Dimensions	133 mm H x 429 mm W x 597 mm D
Weight	23 kg maximum
Related CW model	68047C
Related high performance signal	68347C
Related ultra low noise	69147B

Specifications

PARAMETER	VALUE
Model	68147C
Manufacturer	Anritsu
Instrument Type	Synthesized Signal Generator
Alias	68147C; Anritsu 68147C
Frequency range standard	10 MHz to 20 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 power greater than 8.4 to 20 GHz: +13 dBm
Leveled output with step attenuator 0.01 to 8.4 GHz: +11 dBm
Leveled output with step attenuator greater than 8.4 to 20 GHz: +11 dBm
Leveled output with electronic attenuator 0.01 to 8.4 GHz: +9 dBm
Leveled output with electronic attenuator greater than 8.4 to 20 GHz: +3 dBm
High power Option 15 2 to 20 GHz: +17 dBm

Specifications

PARAMETER	VALUE
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 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

Specifications

PARAMETER	VALUE
Harmonics 2 to 20 GHz	-60 dBc
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	68047C
Related high performance signal	68347C
Related ultra low noise	69147B

Notes
Specs from Anritsu 68000C/69000B Series datasheet for 68x47C / 68147C (0.01–20 GHz). Confirm attenuator type 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

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