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Data Sheet

August 13, 2026

ANRITSU

Anritsu 68185B Synthesized Sweep Generator, 0.5 GHz to 60.0 GHz

Anritsu 68185B Synthesized Sweep Generator 0.5 GHz to 60 GHz The Anritsu 68185B is a microprocessor-based synthesized sweep generator covering 0.5 GHz to 60 GHz in the 681XXB family. It provides phase-locked CW plus analog and step sweeps with front-panel LCD and IEEE-488 GPIB control. The Anritsu 68185B is a microprocessor-based synthesized sweep generator covering 0.5 GHz to 60 GHz in the 681XXB family. It provides phase-locked CW plus analog and step sweeps with front-panel LCD and IEEE-488 GPIB control.



MODEL

Anritsu 68185B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

68185B

LISTING

<https://aumictechlabs.com/products/68185b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 68185B is a synthesized sweep generator delivering signal generation across 0.5 GHz to 60.0 GHz with high output stability and low signal distortion. Built for RF and microwave characterization, it combines broadband frequency coverage with flexible sweep modes and advanced modulation capabilities to support laboratory and field testing environments. Technical Specifications Frequency Range: 0.5 GHz to 60.0 GHz Output Power: +17 dBm maximum, -125 dBm minimum Phase Noise: -100 dBc/Hz SSB at 10 kHz offset from 10 GHz Output Impedance: 50 Ohm Frequency Resolution: 0.1 Hz (optional) Key Features Internal AM, FM, $\varnothing$ M, and pulse modulation User-downloaded complex modulation for custom waveforms Multiple sweep modes:

analog, step, manual, and alternate Ultra-low SSB phase noise performance User-programmable level flatness correction Master/slave operation for multi-instrument control Self-test and secure mode functions Reset capability for system initialization Typical Applications The 68185B addresses RF and microwave signal characterization, component testing, and system integration tasks spanning microwave, millimeter-wave, and sub-60 GHz applications. Its output range from -125 dBm to +17 dBm accommodates low-level receiver testing and higher-power transmitter validation across the full 0.5–60.0 GHz band. Compatibility & Integration Designed for 50 Ohm RF systems, the generator integrates into test benches requiring flexible modulation, multiple sweep control methods, and precise frequency synthesis across the microwave and upper RF spectrum.

Features & description

From manufacturer datasheet

Features

- Frequency coverage 0.5 GHz to 60 GHz
- Synthesized phase-lock with high resolution
- Standard 1 kHz resolution; Option 11 for 0.1 Hz
- Banded leveled output per family power tables
- Optional Option 15 high power and Option 16 oven
- IEEE-488 GPIB remote programming

Applications

- Microwave stimulus across 0.5 GHz to 60 GHz
- ATE automated GPIB source applications
- Component and receiver testing in band
- LO substitution and swept measurements

68185B Characteristics / Specifications

PARAMETER	VALUE
Model	68185B
Manufacturer	Anritsu / Wiltron
Instrument Type	Synthesized Sweep Generator
Alias	68185B; Anritsu 68185B
Frequency range	0.5 GHz to 60 GHz
Family	681XXB Synthesized Sweep Generators
CW frequency resolution standard	1 kHz
CW frequency resolution Option	0.1 Hz
Leveled output 0.5 to 2.2 GHz	+11 dBm
Leveled output greater than 2.2 to 20 GHz	+10 dBm
Leveled output greater than 20 to 40 GHz	+2.5 dBm
Leveled output greater than 40 to 50 GHz	+2 dBm
Leveled output greater than 50 to 60 GHz	+2 dBm
Leveled with step attenuator 0.5 to 2.2 GHz	+10 dBm
Leveled with step attenuator greater than 2.2 to 20 GHz	+8.5 dBm
Leveled with step attenuator greater than 20 to 40 GHz	0 dBm
Output power resolution	0.01 dB
Internal time base aging	less than 2×10^{-8} /day
Internal time base aging Option	less than 5×10^{-10} /day
Remote control	IEEE 488 GPIB
Display	Dot matrix LCD
Dimensions	about 5.25 inHx 16.875 inWx 23.5 inDWeight: about 50 lb
AC power	90 to 132 or 180 to 264 Vac

PARAMETER	VALUE
Power consumption	about 400 VA
Harmonics family typical	-50 to -60 dBc
Nonharmonic spurious typical	-60 dBc
SSB phase noise 68XXXB at 6 GHz 10 kHz class	about -86 to -88 dBc/Hz
Related CW model	68085B
Related signal generator	68285B
Related sweep signal	68385B Notes Power rows from Anritsu 68000B/69000A El Toro datasheet tables for 68185B (0.5 GHz to 60 GHz). Confirm Option 11/15/16, attenuator, and RF connector 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
Output power resolution	0.01 dB
Internal time base aging	less than 2 x 10 ⁻⁸ /day
Internal time base aging Option 16	less than 5 x 10 ⁻¹⁰ /day
Remote control	IEEE 488 GPIB
Display	Dot matrix LCD
Dimensions	about 5.25 in H x 16.875 in W x 23.5 in D
Weight	about 50 lb
AC power	90 to 132 or 180 to 264 Vac
Power consumption	about 400 VA
Harmonics family typical	-50 to -60 dBc
Nonharmonic spurious typical	-60 dBc
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PARAMETER	VALUE
Model	68185B
Manufacturer	Anritsu / Wiltron
Instrument Type	Synthesized Sweep Generator
Alias	68185B; Anritsu 68185B
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Family	681XXB Synthesized Sweep Generators
CW frequency resolution standard	1 kHz
CW frequency resolution Option 11	0.1 Hz
Leveled output 0.5 to 2.2 GHz	+11 dBm
Leveled output greater than 2.2 to 20 GHz: +10 dBm Leveled output greater than 20 to 40 GHz: +2.5 dBm Leveled output greater than 40 to 50 GHz: +2 dBm Leveled output greater than 50 to 60 GHz: +2 dBm Leveled with step attenuator 0.5 to 2.2 GHz: +10 dBm	

Leveled with step attenuator greater than 2.2 to 20 GHz: +8.5 dBm
Leveled with step attenuator greater than 20 to 40 GHz: 0 dBm

Specifications

PARAMETER	VALUE
Output power resolution	0.01 dB
Internal time base aging	less than 2 x 10 ⁻⁸ /day
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SSB phase noise 68XXXB at 6 GHz 10 kHz class: about -86 to -88 dBc/Hz

Specifications

PARAMETER	VALUE
Related CW model	68085B
Related signal generator	68285B
Related sweep signal	68385B

Notes
Power rows from Anritsu 68000B/69000A E1 Toro datasheet tables for 68185B (0.5 GHz to 60 GHz). Confirm Option 11/15/16, attenuator, and RF connector 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 ·
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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.