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Data Sheet

August 13, 2026

ANRITSU

Anritsu 68163B Synthesized Sweep Generator, 2 GHz to 40.0 GHz

Anritsu 68163B Synthesized Sweep Generator 2 GHz to 40 GHz The Anritsu 68163B is a microprocessor-based synthesized sweep generator covering 2 GHz to 40 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 68163B is a microprocessor-based synthesized sweep generator covering 2 GHz to 40 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 68163B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

68163B

LISTING

<https://aumictechlabs.com/products/68163b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 68163B is a synthesized sweep generator covering 2 to 40.0 GHz, engineered for precision signal generation across broadband testing applications. It delivers dependable sweep performance and signal integrity for radar, satellite communications, and high-frequency communication systems. The instrument supports analog, step, and manual sweep modes with independently selectable sweep widths from 1 kHz to full range. Step sweep capability spans 1 to 10,000 steps with dwell times from 1 ms to 99 seconds, enabling rapid frequency transitions with typical switching times under 15 ms plus 1 ms per GHz of step size, or 40 ms maximum. Dual-range alternate sweep operation allows independent power level association across sweep

segments. Technical Specifications Frequency Range: 2 to 40.0 GHz Frequency Resolution: 1 MHz Sweep Modes: Analog, Step (1–10,000 steps), Manual, and Alternate sweep between two independent ranges Sweep Width: 1 kHz to full range, independently selectable Step Size Range: 1 kHz to full instrument range Dwell Time per Step: 1 ms to 99 seconds Switching Time: Typical maximum of 15 ms + 1 ms/GHz step size, or 40 ms, whichever is less Output Level: Up to +17 dBm maximum; -125 dBm minimum Output Accuracy (Sweep Mode): 2 dB SSB Phase Noise: Typically -100 dBc at 10 kHz offset from 10 GHz Modulation: Internal AM, FM, phase modulation, and pulse modulation; user-downloadable complex modulation; external AM and FM support; phase-lock capable Key Features User-selectable level flatness correction Self-test and secure mode functionality Master/slave operation support GPIB (IEEE 488) remote control via rear-panel connector Compact 13.3 cm rack height minimizes footprint Typical Applications Radar systems, satellite communication testing, broadband device characterization, and high-frequency communication system validation. Compatibility & Integration Operates with Anritsu ML4803A power meter and Hewlett-Packard 437B, 438A, and 70100A power measurement instruments. Full GPIB and SCPI programming support via included manuals.

Features & description

From manufacturer datasheet

Features

- Frequency coverage 2 GHz to 40 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 2 GHz to 40 GHz • ATE automated GPIB source applications • Component and receiver testing in band • LO substitution and swept measurements

High power Option 15 2 to 20 GHz: +13 dBm

Output power resolution: 0.01 dB Internal time base aging: less than 2×10^{-8} /day Internal time base aging Option 16: 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 inD 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 SSB phase noise 68XXXB at 6 GHz 10 kHz class: about -86 to -88 dBc/Hz Related CW model: 68063B Related signal generator: 68263B Related sweep signal: 68363B Notes Power rows from Anritsu 68000B/69000A El Toro datasheet tables for 68163B (2 GHz to 40 GHz). Confirm Option 11/15/16, attenuator, and RF connector on the unit.

68163B Characteristics / Specifications

PARAMETER	VALUE
Model	68163B
Manufacturer	Anritsu / Wiltron
Instrument Type	Synthesized Sweep Generator
Alias	68163B; Anritsu 68163B
Frequency range	2 GHz to 40 GHz
Family	681XXB Synthesized Sweep Generators
CW frequency resolution standard	1 kHz
CW frequency resolution Option	0.1 Hz
Leveled output 2 to 20 GHz	+9 dBm
Leveled output greater than 20 to 40 GHz	+6 dBm
Leveled with step attenuator 2 to 20 GHz	+7 dBm
Leveled with step attenuator greater than 20 to 40 GHz	+3 dBm
High power Option 15 2 to 20 GHz	+13 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
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

PARAMETER	VALUE
Related CW model	68063B
Related signal generator	68263B
Related sweep signal	68363B Notes Power rows from Anritsu 68000B/69000A El Toro datasheet tables for 68163B (2 GHz to 40 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	
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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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Notes
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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.