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Data Sheet

August 13, 2026

ANRITSU

Anritsu 68145B Synthesized Sweep Generator, 0.5 GHz to 20.0 GHz

Anritsu 68145B Synthesized Sweep Generator 0.5 GHz to 20 GHz The Anritsu 68145B is a microprocessor-based synthesized sweep generator covering 500 MHz to 20 GHz in the 681XXB family. It provides phase-locked CW plus analog and step sweeps across the band with front-panel LCD and IEEE-488 GPIB control for scalar/vector source applications and ATE. Related 68045B is CW-only; 68245B adds full signal-generator modulation. The Anritsu 68145B is a microprocessor-based synthesized sweep generator covering 500 MHz to 20 GHz in the 681XXB family. It provides phase-locked CW plus analog and step sweeps across the band with front-panel LCD and IEEE-488 GPIB control for scalar/vector source applications and ATE. Related 68045B is CW-only; 68245B adds full signal-generator modulation.



MODEL

Anritsu 68145B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

68145B

LISTING

<https://aumictechlabs.com/products/68145b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu 68145B is a microprocessor-based synthesized sweep generator delivering precise signal generation from 0.5 GHz to 20.0 GHz. It generates discrete CW frequencies, broad full-range sweeps, and narrow-band sweeps with high-resolution phase-lock capability. All operational functions are controllable from the front panel or remotely via IEEE-488 GPIB, except power on/standby control. Technical Specifications Frequency Range 0.5 GHz to 20.0 GHz Output

Power Maximum: +17 dBm Minimum: -125 dBm Guaranteed leveled power to 20 GHz: +17 dBm
Phase Noise Ultra-low SSB phase noise; example performance: -100 dBc at 10 kHz offset from 10 GHz
Sweep Capabilities Sweep width: 1 kHz to full range (0.1 Hz with Option 11) Step sweep: 1 to 10,000 steps Step size: 1 kHz to full range (0.1 Hz resolution with Option 11) Dwell time per step: 1 ms to 99 seconds Switching time: Typically <15 ms + 1 ms/GHz or <40 ms, whichever is less
Alternate sweep mode between two ranges with independent power levels Modulation Internal AM, FM, ØM, and pulse modulation User-downloadable complex modulation Analog and step sweep modes Manual sweep mode
Key Features Synthesized architecture with high-resolution phase-lock Dual control: local front-panel and remote IEEE-488 GPIB operation Wide dynamic power range: -125 dBm to +17 dBm Flexible sweep configurations for broad and narrow-band measurements Variable step counts and dwell times for custom test sequences
Typical Applications CW stimulus testing across microwave bands Swept measurement and characterization Component validation and receiver sensitivity analysis
Compatibility & Integration IEEE-488 GPIB remote control SCPI programming support Rack-mount option (Option 1) available Optional 0.1 Hz frequency resolution (Option 11)

Features & description

From manufacturer datasheet

Features

- Frequency coverage 500 MHz to 20 GHz • Synthesized sweep with high-resolution phase lock • Standard 1 kHz resolution; Option 11 for 0.1 Hz • Banded leveled power per 6XX45 tables • Optional Option 15 high power and Option 16 oven • IEEE-488 GPIB remote programming

Applications

- Analog and step sweep stimulus 0.5 to 20 GHz • Scalar network analyzer and component sweep testing • ATE microwave source with GPIB automation • LO substitution with sweep capability in this band

High power Option 15 greater than 2.2 to 20 GHz: +17 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 Sweep modes: analog and step sweep 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 Related CW model: 68045B Related signal generator: 68245B Related sweep signal model: 68345B Related ultra low noise sweep: 69145A Harmonics family typical: -50 to -60 dBc Nonharmonic spurious typical: -60 dBc Operating temperature: 0 C to 50 C Notes Power rows from Anritsu 68000B/69000A datasheet 6XX45 tables for 68145B (0.5–20 GHz). Confirm Option 15/16 and RF connector on the unit.

68145B Characteristics / Specifications

PARAMETER	VALUE
Model	68145B
Manufacturer	Anritsu / Wiltron
Instrument Type	Synthesized Sweep Generator
Alias	68145B; Anritsu 68145B
Frequency range	0.5 GHz to 20 GHz
Family	681XXB Synthesized Sweep Generators
CW frequency resolution standard	1 kHz
CW frequency resolution Option	0.1 Hz
Leveled output 0.5 to 20 GHz	+13 dBm
Leveled with step attenuator 0.5 to 20 GHz	+11 dBm
High power Option 15 0.5 to 2.2 GHz	+13 dBm
High power Option 15 greater than 2.2 to 20 GHz	+17 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
Sweep modes	analog and step sweep
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
Related CW model	68045B
Related signal generator	68245B
Related sweep signal model	68345B

PARAMETER	VALUE
Related ultra low noise sweep	69145A
Harmonics family typical	-50 to -60 dBc
Nonharmonic spurious typical	-60 dBc
Operating temperature	0 C to 50 C Notes Power rows from Anritsu 68000B/69000A datasheet 6XX45 tables for 68145B (0.5–20 GHz). Confirm Option 15/16 and RF connector on the unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 50 C
Operating Temperature	0 C to 50 C

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
Sweep modes	analog and step sweep
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
Related CW model	68045B
Related signal generator	68245B
Related sweep signal model	68345B
Related ultra low noise sweep	69145A
Harmonics family typical	-50 to -60 dBc
Nonharmonic spurious typical	-60 dBc
Operating temperature	0 C to 50 C
Specifications	
PARAMETER	VALUE
Model	68145B
Manufacturer	Anritsu / Wiltron
Instrument Type	Synthesized Sweep Generator
Alias	68145B; Anritsu 68145B
Frequency range	0.5 GHz to 20 GHz
Family	681XXB Synthesized Sweep Generators

PARAMETER	VALUE
CW frequency resolution standard	1 kHz
CW frequency resolution Option 11	0.1 Hz
Leveled output 0.5 to 20 GHz	+13 dBm

Leveled with step attenuator 0.5 to 20 GHz: +11 dBm
 High power Option 15 0.5 to 2.2 GHz: +13 dBm
 High power Option 15 greater than 2.2 to 20 GHz: +17 dBm

Specifications

PARAMETER	VALUE
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
Sweep modes	analog and step sweep
Remote control	IEEE 488 GPIB
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Dimensions	about 5.25 inHx 16.875 inWx 23.5 inDWeight: about 50 lb
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Harmonics family typical	-50 to -60 dBc
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Operating temperature	0 C to 50 C

Notes

Power rows from Anritsu 68000B/69000A datasheet 6XX45 tables for 68145B (0.5–20 GHz). Confirm Option 15/16 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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.