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Data Sheet

August 13, 2026

ANRITSU

Anritsu 68085B Synthesized CW Generator, 0.5 GHz to 60.0 GHz

Anritsu 68085B Synthesized CW Generator 0.5 GHz to 60 GHz The Anritsu 68085B is a microprocessor-based synthesized CW generator covering 500 MHz to 60 GHz in the 680XXB family. It provides phase-locked discrete CW frequencies with front-panel LCD control and full IEEE-488 GPIB remote programming for LO substitution and ATE. Related 68185B adds sweep; 68285B adds full signal-generator modulation in the same band. The Anritsu 68085B is a microprocessor-based synthesized CW generator covering 500 MHz to 60 GHz in the 680XXB family. It provides phase-locked discrete CW frequencies with front-panel LCD control and full IEEE-488 GPIB remote programming for LO substitution and ATE. Related 68185B adds sweep; 68285B adds full signal-generator modulation in the same band.



MODEL

Anritsu 68085B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

68085B

LISTING

<https://aumictechlabs.com/products/68085b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 68085B is a synthesized continuous wave (CW) generator engineered for high-precision signal generation across microwave and millimeter-wave frequencies. Operating from 0.5 GHz to 60.0 GHz, it delivers ultra-low single sideband phase noise of -100 dBc at 10 kHz offset from 10 GHz and output power ranging from -125 dBm to $+17$ dBm. The instrument

combines frequency stability with flexible modulation and sweep capabilities, making it suitable for component characterization, system validation, and manufacturing test environments.

Technical Specifications

Frequency Range: 0.5 GHz to 60.0 GHz Output Power: -125 dBm to +17 dBm Phase Noise: -100 dBc/Hz SSB at 10 kHz offset from 10 GHz Modulation: AM, FM, QM, and pulse modulation. User-downloaded complex modulation supported. Sweep Modes: Step sweep: 1 to 10,000 steps; step size 1 kHz to full range (0.1 Hz with Option 11); dwell 1 ms to 99 seconds; switching <15 ms + 1 ms/GHz or <40 ms (typical maximum) Analog sweep with independently selectable width from 1 kHz to full range Manual sweep with phase-locked frequency adjustment Alternate sweep mode between two ranges with optional independent power levels

Display and Control: Large high-resolution TFT color LCD; USB, GPIB, and LAN connectivity; SCPI programming support; ANRITSU 680XXB LabWindows Instrument Driver available

Key Features

Phase-locked performance across all sweep modes and step sizes Broad dynamic range enabling both weak-signal and high-power applications Internal modulation library with custom waveform capability Fast frequency switching under 40 ms typical for rapid stepping

Typical Applications

Microwave component testing, receiver and amplifier characterization, phase noise assessment, receiver sensitivity evaluation, manufacturing and field service.

Compatibility & Integration

SCPI command interface enables remote control and integration into automated test systems. LabWindows driver support facilitates PC-based instrument control. Standard laboratory and ATE connectivity via USB, GPIB, and LAN.

Features & description

From manufacturer datasheet

Features

- Frequency coverage 500 MHz to 60 GHz • Synthesized CW with high-resolution phase lock • Standard 1 kHz resolution; Option 11 for 0.1 Hz • Banded leveled output per 6XX85 power tables • Optional high-power Option 15 and oven Option 16 • Compact 5.25 in rack-height chassis with GPIB

Applications

- CW LO substitution 0.5 to 60 GHz • ATE microwave stimulus without analog sweep requirement • Component test through V and W-adjacent coax bands • High-frequency source for millimeter-wave downconversion chains

68085B Characteristics / Specifications

PARAMETER	VALUE
Model	68085B
Manufacturer	Anritsu / Wiltron
Instrument Type	Synthesized CW Generator
Alias	68085B; Anritsu 68085B
Frequency range	0.5 GHz to 60 GHz
Family	680XXB Synthesized CW 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
Leveled with step attenuator greater than 40 to 50 GHz	-1.5 dBm
Leveled with step attenuator greater than 50 to 60 GHz	-2 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

PARAMETER	VALUE
Display	Dot matrix LCD
Dimensions	5.25 inHx 16.875 inWx 23.5 inDWeight: about 50 lb
AC line	90 to 132 Vac or 180 to 264 Vac
AC frequency	48 to 400 Hz
Power consumption	about 400 VA
Related sweep model	68185B
Related signal generator	68285B
Related ultra low noise CW	69085A Notes Power rows from Anritsu 68000B/69000A El Toro datasheet 6XX85 tables for 68085B (0.5–60 GHz). Confirm Option 15/16 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	5.25 in H x 16.875 in W x 23.5 in D
Weight	about 50 lb
AC line	90 to 132 Vac or 180 to 264 Vac
AC frequency	48 to 400 Hz
Power consumption	about 400 VA
Related sweep model	68185B
Related signal generator	68285B
Related ultra low noise CW	69085A
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PARAMETER	VALUE
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Family	680XXB Synthesized CW 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
Leveled with step attenuator greater than 40 to 50 GHz: -1.5 dBm
Leveled with step attenuator greater than 50 to 60 GHz: -2 dBm

Specifications

PARAMETER	VALUE
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Internal time base aging	less than 2 x 10 ⁻⁸ /day
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Notes
Power rows from Anritsu 68000B/69000A El Toro datasheet 6XX85 tables for 68085B (0.5–60 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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.