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**Data Sheet**
August 13, 2026

ANRITSU

# Anritsu 68187B Synthesized Sweep Generator, 0.01 â€“ 60.0 GHz

Anritsu 68187B Synthesized Sweep Generator 10 MHz to 60 GHz The Anritsu 68187B isasynthesized sweep generator covering 10 MHz to 60 GHz in the 68100B family. It provides phase-locked CW plus analog and step sweeps with banded leveled power for network analysis and ATE through V-connector millimeter-wave coax bands. The Anritsu 68187B isasynthesized sweep generator covering 10 MHz to 60 GHz in the 68100B family. It provides phase-locked CW plus analog and step sweeps with banded leveled power for network analysis and ATE through V-connector millimeter-wave coax bands.

| | |
|---|---|
| MODEL<br>**Anritsu 68187B** | CALIBRATION<br>**Available on request** |
| CONDITION<br>**Used** | STATUS<br>**In stock** |
| RFQ / SKU<br>**68187B** | LISTING<br>**https://aumictechlabs.com/products/68187b-2/** |

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

## This unit

The Anritsu 68187B Synthesized Sweep Generator is a microprocessor-based signal source spanning 0.01 to 60.0 GHz, engineered for RF and microwave component characterization, local oscillator replacement, and automated test systems. It delivers phase-locked output across multiple sweep architectures - analog, step, manual, and alternate modes - with output power ranging from -125 dBm to +17 dBm. Ultra-low SSB phase noise and programmable frequency agility supporting up to 1000 non-sequential frequencies enable precise signal simulation and measurement.Technical Specifications Frequency Range: 0.01 to 60.0 GHz, phase-locked across

all sweep modes Output Power: -125 dBm (minimum) to +17 dBm (maximum) Sweep Modes: Analog, step (1 to 10,000 steps), manual, and alternate (dual-range with independent power level assignment) Step Parameters: 1 kHz to full span step size; 1 ms to 99 seconds dwell time per step; switching time typically <15 ms + 1 ms/GHz or <40 ms (whichever is less) Sweep Width: 1 kHz to full frequency range (0.1 Hz resolution available via Option 11) Frequency Agility: Up to 1000 stored non-sequential frequencies via GPIB phase-locked step sweep Frequency Resolution: Standard resolution with optional 0.1 Hz resolution (Option 11) Phase Noise: Ultra-low SSB phase noise characteristic of this synthesizer seriesKey Features Phase-locked frequency step capability with high-resolution tuning Internal modulation: AM, FM, and pulse with 7 waveform options including Gaussian noise and user-defined arbitrary waveforms Pulse modulation support for doublet, triplet, and quadruplet pulses; RADAR blind spot testing compatible Simultaneous synchronized modulations for complex signal generation Front-panel and remote GPIB (IEEE-488) control Volatile memory storage for frequency sequencesTypical Applications Component characterization and network analysis Local oscillator replacement in receiver chains Signal simulation for system-level testing Automated test equipment (ATE) integration RADAR and microwave system validationCompatibility & Integration Full remote programmability via IEEE-488 GPIB interface. Front-panel operation supported for manual frequency and sweep parameter adjustment.

## Features & description

From manufacturer datasheet

### Features

• Frequency coverage 10 MHz to 60 GHz • Synthesized sweep with high resolution phase lock • Standard 1 kHz resolution; Option 11 for 0.1 Hz • Banded leveled power per 6XX87 tables • Optional Option 16 oven time base • IEEE-488 GPIB remote programming

### Applications

• Analog and step sweep stimulus 10 MHz to 60 GHz • Scalar network analyzer and component sweep testing • ATE microwave source with GPIB automation • LO substitution with sweep capability in this band

## 68187B Characteristics / Specifications

| PARAMETER | VALUE |
|---|---|
| **Model** | 68187B |
| **Manufacturer** | Anritsu / Wiltron |
| **Instrument Type** | Synthesized Sweep Generator |
| **Alias** | 68187B; Anritsu 68187B |
| **Frequency range** | 10 MHz to 60 GHz |
| **Family** | 68100B Synthesized Sweep Generators |
| **CW frequency resolution standard** | 1 kHz |
| **CW frequency resolution Option** | 0.1 Hz |
| **Leveled output 0.01 to less than 2 GHz** | plus 12 dBm |
| **Leveled output 2 to 20 GHz** | plus 10 dBm |
| **Leveled output greater than 20 to 40 GHz** | plus 2.5 dBm |
| **Leveled output greater than 40 to 50 GHz** | plus 2 dBm |
| **Leveled output greater than 50 to 60 GHz** | plus 2 dBm |
| **Leveled with step attenuator 0.01 to less than 2 GHz** | plus 10 dBm |
| **Leveled with step attenuator 2 to 20 GHz** | plus 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 |
| **SSB phase noise 68XXXB at 50 GHz 10 kHz offset** | -66 dBc/Hz |

| PARAMETER | VALUE |
| --- | --- |
| **SSB phase noise 68XXXB at 65 GHz class 10 kHz** | -64 dBc/Hz |
| **Harmonics family typical** | -50 to -60 dBc by band |
| **Nonharmonic spurious typical** | -60 dBc |
| **Sweep modes** | analog and step sweep |
| **Remote control** | IEEE 488 GPIB |
| **Dimensions** | about 5.25 inHx 16.875 inWx 23.5 inDWeight: about 50 lb |
| **Related CW model** | 68087B |
| **Related signal generator** | 68287B |
| **Related sweep signal model** | 68387B |
| **Related ultra low noise sweep** | 69187A |
| **RF connector class** | TypeVfemale for models above 40 GHz Notes Power rows from Anritsu 68000B/69000A datasheet 6XX87 tables for 68187B (0.01–60 GHz). Confirm Option 11/16, attenuator availability above 40 GHz, andVconnector 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 family typical** | -50 to -60 dBc by band |
| **Nonharmonic spurious typical** | -60 dBc |
| **Sweep modes** | analog and step sweep |
| **Remote control** | IEEE 488 GPIB |
| **Dimensions** | about 5.25 in H x 16.875 in W x 23.5 in D |
| **Weight** | about 50 lb |
| **Related CW model** | 68087B |
| **Related signal generator** | 68287B |
| **Related sweep signal model** | 68387B |
| **Related ultra low noise sweep** | 69187A |
| **RF connector class** | Type V female for models above 40 GHz |

### Specifications

| PARAMETER | VALUE |
|---|---|
| **Model** | 68187B |
| **Manufacturer** | Anritsu / Wiltron |
| **Instrument Type** | Synthesized Sweep Generator |
| **Alias** | 68187B; Anritsu 68187B |
| **Frequency range** | 10 MHz to 60 GHz |
| **Family** | 68100B Synthesized Sweep Generators |
| **CW frequency resolution standard** | 1 kHz |
| **CW frequency resolution Option 11** | 0.1 Hz |

Leveled output 0.01 to less than 2 GHz: plus 12 dBm
Leveled output 2 to 20 GHz: plus 10 dBm
Leveled output greater than 20 to 40 GHz: plus 2.5 dBm
Leveled output greater than 40 to 50 GHz: plus 2 dBm
Leveled output greater than 50 to 60 GHz: plus 2 dBm
Leveled with step attenuator 0.01 to less than 2 GHz: plus 10 dBm
Leveled with step attenuator 2 to 20 GHz: plus 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 |
| --- | --- |
| **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 |

SSB phase noise 68XXXB at 50 GHz 10 kHz offset: -66 dBc/Hz
SSB phase noise 68XXXB at 65 GHz class 10 kHz: -64 dBc/Hz

## Specifications

| PARAMETER | VALUE |
| --- | --- |
| **Harmonics family typical** | -50 to -60 dBc by band |
| **Nonharmonic spurious typical** | -60 dBc |
| **Sweep modes** | analog and step sweep |
| **Remote control** | IEEE 488 GPIB |
| **Dimensions** | about 5.25 inHx 16.875 inWx 23.5 inDWeight: about 50 lb |
| **Related CW model** | 68087B |
| **Related signal generator** | 68287B |
| **Related sweep signal model** | 68387B |
| **Related ultra low noise sweep** | 69187A |
| **RF connector class** | TypeVfemale for models above 40 GHz |

Notes
Power rows from Anritsu 68000B/69000A datasheet 6XX87 tables for 68187B (0.01–60 GHz). Confirm Option 11/16, attenuator availability above 40 GHz, andVconnector 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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