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**Data Sheet**

August 13, 2026

ANRITSU

# Anritsu 69077B Ultra Low Noise Synthesized CW Generator, 0.01 GHz to 50 GHz

Anritsu 69077B Synthesized CW Generator 10 MHz to 50 GHz The Anritsu 69077B is an ultra-low-noise synthesized CW generator covering 0.01 GHz to 50 GHz in the 69000B family. It delivers broadband coax CW with banded leveled power through 50 GHz for LO and ATE applications requiring the 69B phase-noise class. The Anritsu 69077B is an ultra-low-noise synthesized CW generator covering 0.01 GHz to 50 GHz in the 69000B family. It delivers broadband coax CW with banded leveled power through 50 GHz for LO and ATE applications requiring the 69B phase-noise class.



MODEL

**Anritsu 69077B**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**69077B**

LISTING

<https://aumictechlabs.com/products/69077b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Anritsu 69077B is an ultra-low noise synthesized CW generator delivering high-purity RF and microwave signals across 0.01 GHz to 50 GHz. Built on Anritsu's synthesizer technology, this instrument combines exceptional phase noise performance with wide dynamic range, making it essential for component characterization, system integration, and local oscillator applications where signal integrity is non-negotiable. Technical Specifications Frequency Range: 0.01 GHz to 50 GHz Optional extension down to 0.1 Hz Resolution: 1 kHz standard; 0.1 Hz with Option 11

Switching time: <5 ms for steps <100 MHz; <15 ms + 1 ms/GHz or <40 ms maximum Output Power Guaranteed leveled to 40 GHz: +6 dBm Maximum leveled to 20 GHz: +17 dBm Minimum leveled range: -15 dBm With electronic attenuator: -140 dBm With attenuator: -120 dBm Resolution: 0.01 dB (log) or 0.001 mV (linear) Phase Noise & Spectral Purity SSB phase noise: -100 dBc to -107 dBc at 10 kHz offset from 10 GHz Better than -130 dBc/Hz at 1 GHz, 20 kHz offset Spurious signals: -100 dBc Frequency Stability Internal time base:  $<2 \times 10^{-8}$ /day aging;  $<5 \times 10^{-10}$ /day with Option 16 Temperature stability:  $<2 \times 10^{-8}$ /°C over 0°C;  $<2 \times 10^{-10}$ /°C with Option 16 Oven-stabilized oscillators:  $<5 \times 10^{-10}$  per day Key Features Sweep modes: Digital frequency, digital power, analog, step, and alternate sweep Step sweep: 1 to 10,000 steps with variable dwell time (1 ms to 99 seconds per step) Modulation: Internal AM, FM, phase, and pulse modulation Wide dynamic range supporting measurement of RF/microwave devices Typical Applications Local oscillator (LO) for mixers and frequency conversion Component testing requiring ultra-low phase noise System validation in radar, communications, and measurement systems Calibration and characterization of RF networks and components Compatibility & Integration The 69077B interfaces with swept measurement systems and integrates into test automation environments requiring phase-coherent signals with minimal spectral artifacts.

## Features & description

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From manufacturer datasheet

### Features

- Coverage 0.01 to 50 GHz
- Ultra-low-noise 69B CW architecture
- Digital frequency and power sweep
- Optional deep step/electronic attenuator dynamic range
- Optional 0.1 Hz resolution and oven time base
- Fast switching for ATE
- GPIB remote control
- V connector class

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### Applications

- CW LO substitution to 50 GHz
- mm-wave component CW stimulus
- ATE synthesizer racks
- Mixer/converter LO sources
- Upgradeable 69B platform

## 69077B Characteristics / Specifications

| PARAMETER                                                    | VALUE                              |
|--------------------------------------------------------------|------------------------------------|
| Model                                                        | 69077B                             |
| Manufacturer                                                 | Anritsu                            |
| Instrument Type                                              | Synthesized CW Generator           |
| Alias                                                        | 69077B; Anritsu 69077B             |
| Frequency range                                              | 0.01 GHz to 50 GHz                 |
| Family                                                       | 69000B synthesizers                |
| Leveled power 0.01 to less than 2 GHz                        | +12 dBm                            |
| Leveled power 2 to 20 GHz                                    | +10 dBm                            |
| Leveled power greater than 20 to 40 GHz                      | +2.5 dBm                           |
| Leveled power greater than 40 to 50 GHz                      | +2.5 dBm                           |
| Leveled power with step attenuator 0.01 to less than 2 GHz   | +10 dBm                            |
| Leveled power with step attenuator 2 to 20 GHz               | +8.5 dBm                           |
| Leveled power with step attenuator greater than 20 to 40 GHz | 0 dBm                              |
| Leveled power with step attenuator greater than 40 to 50 GHz | -1 dBm                             |
| Minimum leveled power without attenuator                     | to -15 dBm class                   |
| Minimum leveled power with attenuator high band              | to -105 dBm class                  |
| Output power resolution                                      | 0.01 dB                            |
| CW frequency resolution standard                             | 1 kHz                              |
| CW frequency resolution Option                               | 0.1 Hz                             |
| Internal time base aging                                     | less than $2 \times 10^{-8}$ /day  |
| Internal time base aging Option                              | less than $5 \times 10^{-10}$ /day |
| SSB phase noise at 10 GHz 10 kHz offset                      | ultra-low 69B class                |

| PARAMETER                               | VALUE                                                                                                                                            |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| SSB phase noise at 50 GHz 10 kHz offset | see 69B tables                                                                                                                                   |
| RF output connector                     | TypeVfemale                                                                                                                                      |
| Remote control                          | GPIB                                                                                                                                             |
| Dimensions                              | 133 mmHx 429 mmWx 597 mmDRelatedArevision CW: 69077A                                                                                             |
| Related sweep/signal 68C                | 68377C                                                                                                                                           |
| Related sweep/signal 69B                | 69377B Notes Specs from Anritsu 69000B/68000C Series datasheet for 69×77B / 69077B (0.01–50 GHz). Confirm options and leveled power 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                                |
| Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 69077B                               |
| Manufacturer                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Anritsu                              |
| Instrument Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Synthesized CW Generator             |
| Alias                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 69077B; Anritsu 69077B               |
| Frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.01 GHz to 50 GHz                   |
| Family                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 69000B synthesizers                  |
| Leveled power 0.01 to less than 2 GHz: +12 dBm<br>Leveled power 2 to 20 GHz: +10 dBm<br>Leveled power greater than 20 to 40 GHz: +2.5 dBm<br>Leveled power greater than 40 to 50 GHz: +2.5 dBm<br>Leveled power with step attenuator 0.01 to less than 2 GHz: +10 dBm<br>Leveled power with step attenuator 2 to 20 GHz: +8.5 dBm<br>Leveled power with step attenuator greater than 20 to 40 GHz: 0 dBm<br>Leveled power with step attenuator greater than 40 to 50 GHz: -1 dBm |                                      |
| Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                      |
| PARAMETER                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | VALUE                                |
| Minimum leveled power without attenuator                                                                                                                                                                                                                                                                                                                                                                                                                                         | to -15 dBm class                     |
| Minimum leveled power with attenuator high band                                                                                                                                                                                                                                                                                                                                                                                                                                  | to -105 dBm class                    |
| Output power resolution                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.01 dB                              |
| CW frequency resolution standard                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1 kHz                                |
| CW frequency resolution Option 11                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0.1 Hz                               |
| Internal time base aging                                                                                                                                                                                                                                                                                                                                                                                                                                                         | less than 2 x 10 <sup>-8</sup> /day  |
| Internal time base aging Option 16                                                                                                                                                                                                                                                                                                                                                                                                                                               | less than 5 x 10 <sup>-10</sup> /day |
| SSB phase noise at 10 GHz 10 kHz offset: ultra-low 69B class<br>SSB phase noise at 50 GHz 10 kHz offset: see 69B tables                                                                                                                                                                                                                                                                                                                                                          |                                      |
| Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                      |
| PARAMETER                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | VALUE                                |
| RF output connector                                                                                                                                                                                                                                                                                                                                                                                                                                                              | TypeVfemale                          |

| PARAMETER                | VALUE                                                |
|--------------------------|------------------------------------------------------|
| Remote control           | GPIO                                                 |
| Dimensions               | 133 mmHx 429 mmWx 597 mmDRelatedArevision CW: 69077A |
| Related sweep/signal 68C | 68377C                                               |
| Related sweep/signal 69B | 69377B                                               |

Notes  
Specs from Anritsu 69000B/68000C Series datasheet for 69x77B / 69077B (0.01-50 GHz). Confirm options and leveled power 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](mailto: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.