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**Data Sheet**

August 13, 2026

ANRITSU

# Anritsu 68377C Synthesized High Performance Signal Generator, 10 MHz to 50 GHz

Anritsu 68377C Synthesized Sweep/Signal Generator 10 MHz to 50 GHz The Anritsu 68377C is a synthesized sweep/signal generator covering 0.01 GHz to 50 GHz in the 68000C family. It combines CW, analog/step sweep, and comprehensive modulation at moderate cost relative to the ultra-low-noise 69B line, for broadband signal simulation and swept measurements through 50 GHz. The Anritsu 68377C is a synthesized sweep/signal generator covering 0.01 GHz to 50 GHz in the 68000C family. It combines CW, analog/step sweep, and comprehensive modulation at moderate cost relative to the ultra-low-noise 69B line, for broadband signal simulation and swept measurements through 50 GHz.



MODEL

**Anritsu 68377C**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**68377C**

LISTING

<https://aumictechlabs.com/products/68377c-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Anritsu 68377C is a synthesized signal generator delivering precise RF and microwave stimulus across 10 MHz to 50 GHz for defense, satellite, and wireless communication test environments. The instrument combines ultra-low phase noise with accurate leveled output power down to -120 dBm in 0.01 dB steps, meeting stringent requirements for sensitive receiver characterization. Frequency switching completes in less than 5 ms, accelerating automated test sequences. Its compact 13.3 cm footprint minimizes rack real estate while supporting SCPI

programmability with IVI-COM and LabVIEW driver compatibility for seamless ATE integration. Technical Specifications Frequency Range & Resolution 10 MHz to 50 GHz standard; optional extension to 0.1 Hz Waveguide extensions available to 110 GHz Frequency resolution: 100.0 mHz minimum; 0.1 Hz with Option 11 Output Power +12 dBm to -15 dBm typical (-20 dBm standard) +17 dBm guaranteed leveled power to 20 GHz Leveled output to -120 dBm in 0.01 dB steps Step attenuator options for 20 GHz, 40 GHz, 50 GHz, and 60 GHz bands High power output options for 2-20 GHz and 220 GHz ranges Phase Noise & Switching Ultra-low single-sideband phase noise: -107 dBc at 10 kHz offset from 10 GHz (example) Frequency switching: <5 ms; <5 ms for sweep steps <100 MHz Modulation Capabilities AM, FM, phase, pulse, and scan modulation Seven internal modulating waveforms plus user-defined options Internal Gaussian and uniform noise generators Advanced internal pulse modulation for single and multiple pulse sequences Pulse generator supports moving target simulation, radar analysis, and fading simulation Key Features Broad 10 MHz-50 GHz coverage with optional sub-Hz and millimeter-wave extensions Superior spectral purity and fast frequency agility for dynamic test scenarios Compact form factor for space-constrained ATE racks Flexible modulation suite addresses radar, communications, and receiver testing Typical Applications Receiver sensitivity and blocking characterization Radar blind spot and recovery time analysis Moving target and fading simulation studies Multi-band wireless and satellite communication testing Compatibility & Integration SCPI programmability with IVI-COM and National Instruments LabVIEW driver support enable straightforward control and automation within existing test frameworks.

## Features & description

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From manufacturer datasheet

### Applications

- Broadband swept network analysis to 50 GHz

## 68377C Characteristics / Specifications

| PARAMETER                                                    | VALUE                                             |
|--------------------------------------------------------------|---------------------------------------------------|
| Model                                                        | 68377C                                            |
| Manufacturer                                                 | Anritsu                                           |
| Instrument Type                                              | Synthesized Sweep/Signal Generator                |
| Alias                                                        | 68377C; Anritsu 68377C                            |
| Frequency range                                              | 0.01 GHz to 50 GHz                                |
| Family                                                       | 68000C 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                      | +2.0 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 | -1.5 dBm                                          |
| Analog sweep width                                           | 1 MHz to full range                               |
| Analog sweep time                                            | 30 ms to 99 s                                     |
| Step sweep steps                                             | 1 to 10000                                        |
| List sweep points                                            | up to 2000 per table                              |
| Frequency resolution standard                                | 1 kHz                                             |
| 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                                              | 68C family curves (excellent moderate cost class) |

| PARAMETER                            | VALUE                                                                                                                                            |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Output power resolution              | 0.01 dB                                                                                                                                          |
| Pulse PRF leveled                    | 100 Hz to 5 MHz class                                                                                                                            |
| RF output connector                  | TypeVfemale                                                                                                                                      |
| Remote control                       | GPIB                                                                                                                                             |
| Dimensions                           | 133 mmHx 429 mmWx 597 mmD Mass: less than or equal to 23 kg                                                                                      |
| Related CW 69B                       | 69077B                                                                                                                                           |
| Related ultra low noise sweep signal | 69377B                                                                                                                                           |
| RelatedBrevison                      | 68377B Notes Specs from Anritsu 69000B/68000C Series datasheet for 68×77C / 68377C (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                                                                  | 68377C                             |
| Manufacturer                                                           | Anritsu                            |
| Instrument Type                                                        | Synthesized Sweep/Signal Generator |
| Specifications                                                         |                                    |
| PARAMETER                                                              | VALUE                              |
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| Frequency range                                                        | 0.01 GHz to 50 GHz                 |
| Family                                                                 | 68000C 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: +2.0 dBm                      |                                    |
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| Leveled power with step attenuator greater than 20 to 40 GHz: 0 dBm    |                                    |
| Leveled power with step attenuator greater than 40 to 50 GHz: -1.5 dBm |                                    |
| Specifications                                                         |                                    |
| PARAMETER                                                              | VALUE                              |
| Analog sweep width                                                     | 1 MHz to full range                |
| Analog sweep time                                                      | 30 ms to 99 s                      |
| Step sweep steps                                                       | 1 to 10000                         |
| Specifications                                                         |                                    |
| PARAMETER                                                              | VALUE                              |
| List sweep points                                                      | up to 2000 per table               |
| Frequency resolution standard                                          | 1 kHz                              |
| Frequency resolution Option 11                                         | 0.1 Hz                             |

### Specifications

| PARAMETER                          | VALUE                                             |
|------------------------------------|---------------------------------------------------|
| 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                    | 68C family curves (excellent moderate cost class) |

### Specifications

| PARAMETER               | VALUE                 |
|-------------------------|-----------------------|
| Output power resolution | 0.01 dB               |
| Pulse PRF leveled       | 100 Hz to 5 MHz class |
| RF output connector     | TypeVfemale           |

### Specifications

| PARAMETER      | VALUE                                                       |
|----------------|-------------------------------------------------------------|
| Remote control | GPIB                                                        |
| Dimensions     | 133 mmHx 429 mmWx 597 mmD Mass: less than or equal to 23 kg |
| Related CW 69B | 69077B                                                      |

Related ultra low noise sweep signal: 69377B

RelatedBrevision: 68377B

Notes

Specs from Anritsu 69000B/68000C Series datasheet for 68x77C / 68377C (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 ·  
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.