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Data Sheet
August 13, 2026

ANRITSU

Anritsu 68177C Synthesized Signal Generator, 10 MHz â€“ 50 GHz

Anritsu 68177C Synthesized Signal Generator 10 MHz to 50 GHz The Anritsu 68177C isasynthesized signal generator covering 10 MHz to 50 GHz in the 68100C family. It provides analog sweep, external modulation, digital frequency/power sweep, and GPIB control for network-analysis sources and ATE through K/V coax bands, sharing 68×77C leveled-power tables with related CW and high-performance models. The Anritsu 68177C isasynthesized signal generator covering 10 MHz to 50 GHz in the 68100C family. It provides analog sweep, external modulation, digital frequency/power sweep, and GPIB control for network-analysis sources and ATE through K/V coax bands, sharing 68×77C leveled-power tables with related CW and high-performance models.

MODEL Anritsu 68177C	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 68177C	LISTING https://aumictechlabs.com/products/68177c-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 68177C is a synthesized signal generator delivering frequency coverage from 10 MHz to 50 GHz with ultra-low phase noise and spurious signal content. Engineered for microwave component and subsystem evaluation, it combines fast switching speeds, wide dynamic range, and flexible modulation in a compact 13.3 cm form factor optimized for ATE integration.Technical Specifications Frequency & Resolution Frequency range: 10 MHz to 50 GHz Step size: 1 kHz

standard (0.1 Hz with Option 11) Output Power Without attenuator: -15 dBm (-20 dBm typical) With attenuator: -120 dBm With electronic attenuator: -140 dBm Guaranteed leveled power to 20 GHz: +17 dBm Minimum power: -125 dBm Power level steps: 0.01 dB Signal Quality Ultra-low SSB phase noise Ultra-low spurious signals Switching Performance Frequency switching: less than 5 ms for sweeps with <100 MHz steps Maximum switching time: <15 ms + 1 ms/GHz step size or <40 ms, whichever is less Sweep & Modulation Sweep modes: digital frequency, digital power, fast analog, step, manual, and alternate Modulation: external FM (locked/unlocked), external AM (log/linear), internal AM/FM/ØM/pulse, user-downloaded arbitraryKey Features Menu-driven front panel with intuitive controls Internal list mode reduces ATE controller overhead Optional SCPI programmability for automated test sequences Free application drivers: IVI-COM and National Instruments LabVIEW compatibleTypical Applications RF component characterization, microwave subsystem testing, and automated test environments requiring precise signal generation across extended frequency bands with minimal switching latency.Compatibility & Integration Option 1: Rack mounting kit Option 11: 0.1 Hz frequency resolution Option 14: Anritsu 360B VNA compatibility Option 15A: High power output Option 17: Front panel deletion for remote-control applications

Features & description

From manufacturer datasheet

Features

• Frequency coverage 10 MHz to 50 GHz • Analog sweep plus digital frequency and power sweep • External AM and FM modulation • Less than 5 ms switching for less than 100 MHz steps • Optional attenuator and Option 15 high power • IEEE-488 GPIB remote control

Applications

• Swept and CW microwave stimulus 10 MHz to 50 GHz • External AM/FM LO and component testing • ATE with fast switching and list mode • Network analyzer source substitution in this band

68177C Characteristics / Specifications

PARAMETER	VALUE
Model	68177C
Manufacturer	Anritsu
Instrument Type	Synthesized Signal Generator
Alias	68177C; Anritsu 68177C
Frequency range standard	10 MHz to 50 GHz
Frequency extension Option	0.1 Hz to 10 MHz
Family	68100C Series
Leveled output 0.01 to less than 2 GHz	+12 dBm
Leveled output 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	+2.0 dBm
Leveled with step attenuator 0.01 to less than 2 GHz	+10 dBm
Leveled with step attenuator 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
Minimum leveled power without attenuator	-15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	-120 dBm
Output power resolution	0.01 dB or 0.001 mV
CW frequency resolution standard	1 kHz
CW frequency resolution Option	0.1 Hz
Internal time base aging	less than 2 × 10^-8/day
Internal time base aging Option	less than 5 × 10^-10/day

PARAMETER	VALUE
SSB phase noise 68XXXC 2 to 6 GHz at 10 kHz	-86 dBc/Hz
Harmonics family typical	-50 to -60 dBc by band
Nonharmonic spurious	-60 dBc
Sweep step switching less than 100 MHz	less than 5 ms
Remote control	IEEE 488 GPIB
Dimensions	133 mmHx 429 mmWx 597 mmDWeight: 23 kg maximum
Related CW model	68077C
Related high performance signal	68377C
Related ultra low noise	69177B Notes Specs from Anritsu 68000C/69000B Series datasheet for 68×77C / 68177C (0.01–50 GHz). Confirm Option 11/15/16/22 and attenuator type 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.

performance models.

Applications
- Swept and CW microwave stimulus 10 MHz to 50 GHz
- External AM/FM LO and component testing
- ATE with fast switching and list mode
- Network analyzer source substitution in this band

Key Features
- Frequency coverage 10 MHz to 50 GHz
- Analog sweep plus digital frequency and power sweep
- External AM and FM modulation
- Less than 5 ms switching for less than 100 MHz steps
- Optional attenuator and Option 15 high power
- IEEE-488 GPIB remote control

Technical Specifications

Specifications

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Leveled output 2 to 20 GHz: +10 dBm
Leveled output greater than 20 to 40 GHz: +2.5 dBm
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Leveled with step attenuator 0.01 to less than 2 GHz: +10 dBm
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Leveled with step attenuator greater than 20 to 40 GHz: 0 dBm
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Specifications

PARAMETER	VALUE
Minimum leveled power without attenuator	-15 dBm (-20 dBm typical)
Minimum leveled power with attenuator	-120 dBm
Output power resolution	0.01 dB or 0.001 mV
CW frequency resolution standard	1 kHz
CW frequency resolution Option 11	0.1 Hz
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 68XXXC 2 to 6 GHz at 10 kHz: -86 dBc/Hz

Specifications

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Notes
Specs from Anritsu 68000C/69000B Series datasheet for 68x77C / 68177C (0.01–50 GHz). Confirm Option 11/15/16/22 and attenuator type 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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Generated August 13, 2026