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Data Sheet

August 13, 2026

ANRITSU

Anritsu MG3691B Synthesized Signal Generator, 10MHz to 10GHz

Anritsu MG3691B Synthesized Signal Generator 2 to 10 GHz The Anritsu MG3691B is an RF/microwave synthesized signal generator in the MG3690B Series with standard coverage from 2 GHz to 10 GHz on a female output. Optional digital or analog downconversion extends coverage to 10 MHz, and Option 22 DDS extends to 0.1 Hz. It provides fine frequency resolution, high leveled output, excellent spectral purity, optional ultra-low phase noise, and AM/FM/phase/pulse modulation packages for dual RF/microwave bench and ATE use. Electronic step attenuator Option 2E is available on MG3691B. The Anritsu MG3691B is an RF/microwave synthesized signal generator in the MG3690B Series with standard coverage from 2 GHz to 10 GHz on a female output. Optional digital or analog downconversion extends coverage to 10 MHz, and Option 22 DDS extends to 0.1 Hz. It provides fine frequency resolution, high leveled output, excellent spectral purity, optional ultra-low phase noise, and AM/FM/phase/pulse modulation packages for dual RF/microwave bench and ATE use. Electronic step attenuator Option 2E is available on MG3691B.



MODEL Anritsu MG3691B	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU MG3691B	LISTING https://aumictechlabs.com/products/mg3691b-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu MG3691B is a synthesized signal generator spanning 10 MHz to 10 GHz, delivering stable, precise RF output with meticulous amplitude control. Engineered for laboratory, production, and research environments, it addresses diverse RF testing requirements in modern communication systems with high frequency resolution, low phase noise, and flexible modulation capabilities.

Technical Specifications

Frequency Performance Frequency range: 10 MHz to 10 GHz
Frequency resolution: 1 Hz minimum
Frequency accuracy: $\pm 5 \times 10^{-7}$ per hour (typical)
Output Characteristics Output level range: -130 dBm to +13 dBm
Output level resolution: 0.1 dB steps
Output level accuracy: ± 1.0 dB typical at +10 dBm, 1 GHz
Output impedance: 50 Ω
RF connector: Type N female

Signal Quality Harmonic distortion: -30 dBc or better at +10 dBm output, 1 GHz
Spurious output: -60 dBc or better at +10 dBm output, 1 GHz
Phase noise: -110 dBc/Hz at 1 kHz offset (typical, 1 GHz carrier, -10 dBm output)

Modulation Internal modulation available at 1 kHz and 400 Hz for AM (0–100% depth), FM (0–100 kHz deviation), and PM (0–10 radians peak).

Sweep Capability Linear and logarithmic frequency sweep with adjustable level sweep and sweep time.

Key Features Precise 1 Hz frequency resolution across a decade-spanning range
Wide dynamic range: -130 dBm to +13 dBm output capability
Multiple modulation modes (AM, FM, PM) with internal low-frequency sources
Excellent phase noise performance for sensitive receiver testing
GPIO (IEEE-488) interface for remote programming and automation

Typical Applications Component characterization, receiver sensitivity and selectivity testing, transmitter power and spectral purity validation, communication standard compliance verification, and system integration testing where stable, low-noise RF sources are required.

Compatibility & Integration GPIO control interface enables integration with automated test systems and laboratory equipment suites. 50 Ω output impedance matches standard RF testing infrastructure. AC power requirement: 100/120/220/240 VAC $\pm 10\%$, 50/60 Hz; 300 VA typical consumption.

Features & description

From manufacturer datasheet

Features

- Base frequency coverage 2 to 10 GHz, K(f) output
- Frequency resolution 0.01 Hz class (0.02 Hz below 10 MHz with Option 22)
- Optional ultra low phase noise Option 3 and digital downconverter Option 4
- Optional AM/FM/phase/pulse modulation suites (Opt 28A class)
- Optional mechanical or electronic step attenuator (2E on MG3691B)
- Analog, step, and list frequency sweeps plus CW power sweep
- High power Option 15 available on MG3690B family
- MG3690B platform successor to MG3691A coverage class

Applications

- Microwave CW and modulated stimulus 2 to 10 GHz
- Dual RF/microwave coverage with Option 4/5/22 extensions
- Receiver, component, and system characterization to 10 GHz
- Low phase noise LO and synthesizer substitution
- ATE sources with GPIB automation
- High power Option 15 stimulus where installed

MG3691B Characteristics / Specifications

PARAMETER	VALUE
Model	MG3691B
Manufacturer	Anritsu
Instrument Type	RF/Microwave Synthesized Signal Generator
Alias	MG3691B; Anritsu MG3691B
Series	MG3690B
Frequency range standard	2 GHz to 10 GHz
Frequency Option	10 MHz to 2.2 GHz
RF output connector standard	K female
Leveled output power STD 2 to 10 GHz	+19.0 dBm
Leveled output with step attenuator STD 2 to 10 GHz	+18.0 dBm
Leveled output with Option 4 or 5 below 2 GHz	+19.0 dBm
Leveled output with Option 4 or 5 and step attenuator below 2 GHz	+18.0 dBm
Leveled output with electronic attenuator STD 2 to 10 GHz	+15.0 dBm
Leveled output with Option 4 or 5 and electronic attenuator below 2 GHz	+13.0 dBm
Output power resolution	0.01 dB or 0.001 mV
Frequency resolution typical	0.01 Hz
Frequency resolution Option 22 below 10 MHz	0.02 Hz
CW accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2×10^{-9} /day
Internal time base aging Option	less than 5×10^{-10} /day
Switching time typical max	less than 40 ms to within 1 kHz

PARAMETER	VALUE
Harmonics greater than 2 to 20 GHz standard	less than -60 dBc
Nonharmonic spurious greater than 2 to 67 GHz	less than -60 dBc
Minimum leveled power without attenuator class	to -5 dBm (-10 dBm typical)
Minimum leveled power with mechanical attenuator class	to -105 dBm
Minimum leveled power with electronic attenuator	to -115 dBm
Weight	18 kg maximum
DimensionsHxWxD	133 mm x 429 mm x 450 mm
Remote control	GPIB
Related higher band model	MG3692B 2 to 20 GHz
RelatedArevision	MG3691A Notes Specs from Anritsu MG3690B Series technical data sheet for MG3691B (2–10 GHz). Confirm installed options (2E/3/4/5/15/16/22/modulation), exact max leveled power on the calibration label, and connector condition 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	MG3691B
Manufacturer	Anritsu
Instrument Type	RF/Microwave Synthesized Signal Generator
Alias	MG3691B; Anritsu MG3691B
Series	MG3690B
Frequency range standard	2 GHz to 10 GHz
Frequency Option 5	10 MHz to 2 GHz
Frequency Option 4	10 MHz to 2.2 GHz
Frequency Option 22	0.1 Hz to 10 MHz
RF output connector standard	K female

Leveled output power STD 2 to 10 GHz: +19.0 dBm

Leveled output with step attenuator STD 2 to 10 GHz: +18.0 dBm

Leveled output with Option 4 or 5 below 2 GHz: +19.0 dBm

Leveled output with Option 4 or 5 and step attenuator below 2 GHz: +18.0 dBm

Leveled output with electronic attenuator STD 2 to 10 GHz: +15.0 dBm

Leveled output with Option 4 or 5 and electronic attenuator below 2 GHz: +13.0 dBm

Specifications

PARAMETER	VALUE
Output power resolution	0.01 dB or 0.001 mV
Frequency resolution typical	0.01 Hz
Frequency resolution Option 22 below 10 MHz	0.02 Hz
CW accuracy	same as internal or external 10 MHz time base
Internal time base aging	less than 2 x 10^-9/day
Internal time base aging Option 16	less than 5 x 10^-10/day
Switching time typical max	less than 40 ms to within 1 kHz

Harmonics greater than 2 to 20 GHz standard: less than -60 dBc

Nonharmonic spurious greater than 2 to 67 GHz: less than -60 dBc

Specifications

PARAMETER	VALUE
Minimum leveled power without attenuator class	to -5 dBm (-10 dBm typical)
Minimum leveled power with mechanical attenuator class	to -105 dBm
Minimum leveled power with electronic attenuator	to -115 dBm
Weight	18 kg maximum
DimensionsHxWxD	133 mm x 429 mm x 450 mm
Remote control	GPIOB
Related higher band model	MG3692B 2 to 20 GHz
RelatedArevision	MG3691A

Notes

Specs from Anritsu MG3690B Series technical data sheet for MG3691B (2-10 GHz). Confirm installed options (2E/3/4/5/15/16/22/modulation), exact max leveled power on the calibration label, and connector condition 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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.