

**Aumictech**

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Data Sheet

August 13, 2026

ANRITSU

Anritsu MG3691A Synthesized CW Generator, 8.4 GHz

Anritsu MG3691A Synthesized Signal Generator 2 to 8.4 GHz The Anritsu MG3691A is an RF/microwave synthesized signal generator in the MG3690A Series with standard coverage from 2 GHz to 8.4 GHz on a female output. Optional RF downconversion and DDS extend coverage to 10 MHz or 0.1 Hz. It offers fine frequency resolution, high leveled output power, excellent spectral purity, and optional ultra-low phase noise, modulation, and attenuator packages for dual RF/microwave applications as the lowest-band MG3690A mainframe. The Anritsu MG3691A is an RF/microwave synthesized signal generator in the MG3690A Series with standard coverage from 2 GHz to 8.4 GHz on a female output. Optional RF downconversion and DDS extend coverage to 10 MHz or 0.1 Hz. It offers fine frequency resolution, high leveled output power, excellent spectral purity, and optional ultra-low phase noise, modulation, and attenuator packages for dual RF/microwave applications as the lowest-band MG3690A mainframe.



MODEL

Anritsu MG3691A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MG3691A

LISTING

<https://aumictechlabs.com/products/mg3691a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu MG3691A is a synthesized CW generator delivering stable RF and microwave signal generation from 2 to 8.4 GHz. Purpose-built for RF component testing and system development, it combines precise frequency control with flexible modulation and sweep capabilities to support demanding measurement and characterization workflows.

Technical Specifications

Frequency Performance Frequency range: 2 to 8.4 GHz Optional extension down to 0.1 Hz Frequency resolution: 0.01 Hz minimum step size Accuracy tracks internal or external 10 MHz time base

Output Power Standard output: +13 dBm typical Optional high-power configuration: Up to +17 dBm guaranteed leveled to 20 GHz Attenuation options: 110 dB mechanical or 120 dB electronic attenuator Leveled output range with Option 15: -5 dBm to -105 dBm

Signal Purity Phase noise: Less than 130 dBc/Hz @ 1 GHz, 10 kHz offset (with optional digital down-converter) Spurious signals: <-60 dBc across 2.2 GHz to 65 GHz Residual FM: 2 GHz), 1 μ s (<2 GHz)

Modulation bandwidth: Typically ≤ 250 Hz

User-defined waveforms: Download capability via external software

IQ modulation: Supported through IF up-conversion option

Sweep Modes

Digital sweep: Frequency and power

Analog ramp sweep: 1 MHz to full range, 30 ms to 99 seconds

Step sweep: 0.01 Hz resolution, up to 10,000 steps with variable dwell (1 ms to 99 seconds)

Fixed-rate sweep: 20 ms to 99 seconds

Alternate sweep: Between two ranges with independent power levels

Key Features

Phase-locked step synthesis for precise frequency control

Independent sweep width and time selection

Dual attenuation architecture for extended dynamic range

Technology foundation from 69C series architecture

Typical Applications

RF component characterization, microwave system development, signal integrity validation, and subsystem performance testing.

Features & description

From manufacturer datasheet

Features

- Base frequency coverage 2 to 8.4 GHz, K(f) output
- Frequency resolution 0.01 Hz class (0.02 Hz below 10 MHz with Option 22)
- High leveled output power on MG3690A low band class
- Optional ultra low phase noise Option 3 and digital downconverter RF options
- Optional AM/FM/phase/pulse modulation packages
- Optional mechanical or electronic attenuator
- Analog, step, and list frequency sweeps plus CW power sweep
- Standard 3 year OEM warranty claim on MG3690A Series

Applications

- Microwave CW and modulated stimulus 2 to 8.4 GHz
- Dual RF/microwave coverage with Option 4/5/22 extensions
- Receiver, component, and system characterization
- Low phase noise LO and synthesizer substitution
- ATE sources with GPIB automation
- Optional mmWave multiplier drive for higher bands

High power Option 15 class: +17 dBm family midband

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 External 10 MHz reference input: plus or minus 100 Hz, 0 to +20 dBm typical High stability time base option: Option 16 ovenized 10 MHz Ultra low phase noise option: Option 3 Minimum leveled power without attenuator class: to -20 dBm typical family Minimum leveled power with mechanical attenuator class: to -120 dBm family Harmonics greater than 2 to 20 GHz standard: less than -60 dBc Nonharmonic spurious greater than 2 to 65 GHz: less than -60 dBc Weight: 18 kg maximum DimensionsHxWxD: 133 mm x 429 mm x 450 mm Stored setups: front panel plus nine additional nonvolatile setups List/step sweep: supported (analog, step, list, CW power sweep) Sweep triggers: Auto, External TTL, Single Self test: yes via soft key Remote control: GPIB Warranty years standard claim: 3 Related higher band model: MG3692A 2 to 20 GHz RelatedRevision: MG3691B 2 to 10 GHz Notes Specs from Anritsu MG3690A Series technical data sheet context for MG3691A (2–8.4 GHz). Confirm installed options (3/4/5/15/16/22/attenuator/modulation), exact max leveled power on the calibration label, and connector condition on the unit.

MG3691A Characteristics / Specifications

PARAMETER	VALUE
Model	MG3691A
Manufacturer	Anritsu
Instrument Type	RF/Microwave Synthesized Signal Generator
Alias	MG3691A; Anritsu MG3691A
Series	MG3690A
Frequency range standard	2 GHz to 8.4 GHz
Frequency Option	10 MHz to 2.2 GHz
RF output connector standard	K female
Leveled output power STD 2 to 8.4 GHz class	+13.0 dBm family low band
Leveled output with step attenuator STD class	+11.0 dBm family
Leveled output with Option 4 or 5 below 2 GHz class	+17.0 dBm family
High power Option 15 class	+17 dBm family midband
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
External 10 MHz reference input	plus or minus 100 Hz, 0 to +20 dBm typical
High stability time base option	Option 16 ovenized 10 MHz
Ultra low phase noise option	Option 3
Minimum leveled power without attenuator class	to -20 dBm typical family
Minimum leveled power with mechanical attenuator class	to -120 dBm family

PARAMETER	VALUE
Harmonics greater than 2 to 20 GHz standard	less than -60 dBc
Nonharmonic spurious greater than 2 to 65 GHz	less than -60 dBc
Weight	18 kg maximum
DimensionsHxWxD	133 mm x 429 mm x 450 mm
Stored setups	front panel plus nine additional nonvolatile setups
List/step sweep	supported (analog, step, list, CW power sweep)
Sweep triggers	Auto, External TTL, Single
Self test	yes via soft key
Remote control	GPIB
Warranty years standard claim	3
Related higher band model	MG3692A 2 to 20 GHz
RelatedBrevision	MG3691B 2 to 10 GHz Notes Specs from Anritsu MG3690A Series technical data sheet context for MG3691A (2–8.4 GHz). Confirm installed options (3/4/5/15/16/22/attenuator/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	
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PARAMETER	VALUE
Model	MG3691A
Manufacturer	Anritsu
Instrument Type	RF/Microwave Synthesized Signal Generator
Alias	MG3691A; Anritsu MG3691A
Series	MG3690A
Frequency range standard	2 GHz to 8.4 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 8.4 GHz class: +13.0 dBm family low band	
Leveled output with step attenuator STD class: +11.0 dBm family	
Leveled output with Option 4 or 5 below 2 GHz class: +17.0 dBm family	
Specifications	
PARAMETER	VALUE
High power Option 15 class	+17 dBm family midband
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
External 10 MHz reference input	plus or minus 100 Hz, 0 to +20 dBm typical
High stability time base option	Option 16 ovenized 10 MHz
Ultra low phase noise option	Option 3
Minimum leveled power without attenuator class	to -20 dBm typical family
Minimum leveled power with mechanical attenuator class	to -120 dBm family

Harmonics greater than 2 to 20 GHz standard: less than -60 dBc
Nonharmonic spurious greater than 2 to 65 GHz: less than -60 dBc

Specifications

PARAMETER	VALUE
Weight	18 kg maximum
DimensionsHxWxD	133 mm x 429 mm x 450 mm
Stored setups	front panel plus nine additional nonvolatile setups
List/step sweep	supported (analog, step, list, CW power sweep)
Sweep triggers	Auto, External TTL, Single
Self test	yes via soft key
Remote control	GPIO

Warranty years standard claim: 3
Related higher band model: MG3692A 2 to 20 GHz
RelatedBreversion: MG3691B 2 to 10 GHz

Notes
Specs from Anritsu MG3690A Series technical data sheet context for MG3691A (2–8.4 GHz). Confirm installed options (3/4/5/15/16/22/attenuator/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.