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Data Sheet
August 13, 2026

ANRITSU

Anritsu MG3696A Synthesizer, 2GHz to 65 GHz

Anritsu MG3696A Synthesized Signal Generator 2–65 GHz The Anritsu MG3696A isabroadband high-performance RF/microwave signal generator in the MG3690A Series with standard coverage from 2 GHz to 65 GHz onaVfemale output. Optional RF downconversion and DDS extend coverage to 10 MHz or 0.1 Hz. It offers fine frequency resolution, leveled output, excellent spectral purity, and optional ultra-low phase noise, modulation, and attenuator packages for dual RF/microwave applications through V-band. The Anritsu MG3696A isabroadband high-performance RF/microwave signal generator in the MG3690A Series with standard coverage from 2 GHz to 65 GHz onaVfemale output. Optional RF downconversion and DDS extend coverage to 10 MHz or 0.1 Hz. It offers fine frequency resolution, leveled output, excellent spectral purity, and optional ultra-low phase noise, modulation, and attenuator packages for dual RF/microwave applications through V-band.

MODEL Anritsu MG3696A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU MG3696A	LISTING https://aumictechlabs.com/products/mg3696a-2/

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The Anritsu MG3696A is a synthesized signal generator delivering precision frequency synthesis across 2 GHz to 65 GHz for advanced RF and microwave testing. Purpose-built for radar systems, telecommunications, aerospace, and defense applications, it combines low phase noise, stable frequency output, and high spectral purity in a configurable platform. Frequency resolution to 0.01

Hz and switching times under 40 ms enable rapid, accurate measurements in complex test environments.The instrument accepts internal or external 10 MHz reference inputs and offers extensive modulation and attenuation options to adapt to evolving measurement requirements.Technical Specifications Frequency Performance Frequency range: 2 GHz to 65 GHz (standard) Optional extension: 0.1 Hz to 2 GHz with Option 22 (DDS-based; modulation and analog sweep unavailable below 10 MHz) Optional extension: 10 MHz to 2 GHz with down-converter (Option 4 or 5) Frequency resolution: 0.01 Hz (0.02 Hz below 10 MHz with Option 22) Frequency accuracy: Referenced to internal or external 10 MHz time base Internal time base stability: $<2 \times 10^{-9}$/day (aging), $<2 \times 10^{-8}$/°C (0°C to 55°C); $<5 \times 10^{-10}$/day and $<2 \times 10^{-10}$/°C with Option 16 External reference input: 0 to +20 dBm, ±50 Hz tolerance Frequency switching: <40 ms to within 1 kHz Output Power Standard output power: +10 dBm (2–20 GHz), +3 dBm (20–65 GHz), +12 dBm (≤2 GHz with Option 4/5) Output range: +10 dBm to −110 dBm Attenuation options: 90 dB mechanical, 110 dB mechanical, 120 dB electronic Phase Noise Standard performance: −105 dBc/Hz at 10 kHz offset (frequency-dependent) Ultra low phase noise (Option 3): <−130 dBc/Hz @ 1 GHz, 10 kHz offset Modulation Internal and external: AM, FM, phase, pulse Options: AM (Option 14), FM/phase (Option 12), pulse (Option 13/13X), analog suite (Option 25X)Key Features 0.01 Hz frequency resolution across full range Configurable down to 0.1 Hz with DDS option Sub-40 ms frequency switching for rapid test sequences Selectable time base stability with optional high-stability module 10 MHz reference I/O for synchronized multi-instrument operation Multiple attenuation architectures for wide dynamic rangeTypical Applications Radar system characterization and validation Component and subsystem testing in telecommunications Aerospace and defense RF measurements Phase noise and spectral purity assessmentCompatibility & Integration External 10 MHz reference acceptance enables clock synchronization across test benches. Standard 10 MHz reference output (1 Vp-p into 50 Ω, AC coupled) simplifies integration with phase-coherent measurement systems.

Features & description

From manufacturer datasheet

Features

• Base frequency coverage 2 to 65 GHz, V(f) output • Frequency resolution 0.01 Hz class (0.02 Hz below 10 MHz with Option 22) • Standard leveled power +10 dBm to 20 GHz; +3 dBm above 20 to 65 GHz • Optional ultra-low phase noise (Option 3) and digital downconverter RF options • Optional AM/FM/ΦM/PM and 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 2–65 GHz • Dual RF/microwave coverage with Option 4/5/22 extensions • Receiver, component, and system characterization to 65 GHz • Low-phase-noise LO and synthesizer substitution • ATE sources with GPIB automation • Optional mmWave multiplier drive for higher bands

MG3696A Characteristics / Specifications

PARAMETER	VALUE
Anritsu MG3696A Synthesized Signal Generator	65 GHz Overview The Anritsu MG3696A isabroadband high-performance RF/microwave signal generator in the MG3690A Series with standard coverage from 2 GHz to 65 GHz onaVfemale output. Optional RF downconversion and DDS extend coverage to 10 MHz or 0.1 Hz. It offers fine frequency resolution, leveled output, excellent spectral purity, and optional ultra-low phase noise, modulation, and attenuator packages for dual RF/microwave applications through V-band.
Model	MG3696A
Manufacturer	Anritsu
Instrument Type	RF/Microwave Synthesized Signal Generator
Alias	MG3696A; Anritsu MG3696A
Series	MG3690A
Frequency range standard	2 GHz to 65 GHz
Frequency Option	10 MHz to 2.2 GHz
RF output connector standard	V female
Leveled output power STD 2 to 20 GHz	+10.0 dBm
Leveled output power STD greater than 20 to 65 GHz	+3.0 dBm
Leveled output with step attenuator STD 2 to 20 GHz	+8.0 dBm
Leveled output with step attenuator STD greater than 20 to 65 GHz	+0.0 dBm typical 60 to 65 GHz
Leveled output with Option 5 at or below 2 GHz	+12.0 dBm
Leveled output with Option 4 at or below 2.2 GHz	+12.0 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

PARAMETER	VALUE
CW accuracy	same as internal or external 10 MHz time base
High stability time base option	Option 16 ovenized 10 MHz
Ultra low phase noise option	Option 3
Minimum leveled power without attenuator class	to -15 dBm (-20 dBm typical)
Minimum leveled power with mechanical attenuator class	to -105 dBm
Harmonics greater than 40 to 65 GHz	less than -25 dBc
Nonharmonic spurious greater than 2 to 65 GHz	less than -60 dBc class
Weight	18 kg maximum
DimensionsHxWxD	133 mm x 429 mm x 450 mm
List/step sweep	supported (analog, step, list, CW power sweep)
Remote control	GPIB
Warranty years standard claim	3
Related lower band model	MG3695A 2 to 50 GHz
Related sibling model	MG3694A 2 to 40 GHz Notes Specs from Anritsu MG3690A Series technical data sheet for MG3696A (2–65 GHz; 60–65 GHz power typical). 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.

performance RF/microwave signal generator in the MG3690A Series with standard coverage from 2 GHz to 65 GHz onaVfemale output. Optional RF downconversion and DDS extend coverage to 10 MHz or 0.1 Hz. It offers fine frequency resolution, leveled output, excellent spectral purity, and optional ultra-low phase noise, modulation, and attenuator packages for dual RF/microwave applications through V-band.

Applications
- Microwave CW and modulated stimulus 2–65 GHz
- Dual RF/microwave coverage with Option 4/5/22 extensions
- Receiver, component, and system characterization to 65 GHz
- Low-phase-noise LO and synthesizer substitution
- ATE sources with GPIB automation
- Optional mmWave multiplier drive for higher bands

Key Features
- Base frequency coverage 2 to 65 GHz, V(f) output
- Frequency resolution 0.01 Hz class (0.02 Hz below 10 MHz with Option 22)
- Standard leveled power +10 dBm to 20 GHz; +3 dBm above 20 to 65 GHz
- Optional ultra-low phase noise (Option 3) and digital downconverter RF options
- Optional AM/FM/ΦM/PM and 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

Technical Specifications

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Model	MG3696A
Manufacturer	Anritsu
Instrument Type	RF/Microwave Synthesized Signal Generator
Alias	MG3696A; Anritsu MG3696A
Series	MG3690A
Frequency range standard	2 GHz to 65 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	V female

Leveled output power STD 2 to 20 GHz: +10.0 dBm
Leveled output power STD greater than 20 to 65 GHz: +3.0 dBm
Leveled output with step attenuator STD 2 to 20 GHz: +8.0 dBm
Leveled output with step attenuator STD greater than 20 to 65 GHz: +0.0 dBm typical 60 to 65 GHz
Leveled output with Option 5 at or below 2 GHz: +12.0 dBm
Leveled output with Option 4 at or below 2.2 GHz: +12.0 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
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Harmonics greater than 40 to 65 GHz	less than -25 dBc

Nonharmonic spurious greater than 2 to 65 GHz: less than -60 dBc class

Specifications

PARAMETER	VALUE
Weight	18 kg maximum
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List/step sweep	supported (analog, step, list, CW power sweep)
Remote control	GPIB

Warranty years standard claim: 3
Related lower band model: MG3695A 2 to 50 GHz
Related sibling model: MG3694A 2 to 40 GHz

Notes
Specs from Anritsu MG3690A Series technical data sheet for MG3696A (2–65 GHz; 60–65 GHz power typical). 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
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
https://aumictechlabs.com

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