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Data Sheet

August 13, 2026

ANRITSU

Anritsu MG37022A Signal Generator

Remote interfaces: USB 2.0 device and host, Ethernet LAN, IEEE-488 GPIB, RS-232 Option 037: Performance Suite (Options 002, 004, 015, 026) Related brochure family: MG37020A / MG3702xA Specs from Anritsu MG37020A/MG37022A product brochure and MG3702xA manuals. Base MG37022A is 2–20 GHz; confirm Option 004 before claiming 10 MHz start, and Option 015 before quoting +23 dBm. Anritsu MG37022A Fast Switching Microwave Signal Generator The Anritsu MG37022A is a fast-switching microwave signal generator with a base coverage of 2 GHz to 20 GHz (extendable to 10 MHz with Option 004). Typical 100 μ s per point switching, low phase noise, high output power options, and USB/LAN/GPIB connectivity target antenna, satellite payload, RFIC/MMIC, and radar/EW ATE applications.



MODEL

Anritsu MG37022A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MG37022A

LISTING

<https://aumictechlabs.com/products/mg37022a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu MG37022A is a microwave signal generator spanning 10 MHz to 20 GHz, engineered for frequency-agile RF and microwave test applications. It delivers output power to +23 dBm at 20 GHz with exceptional phase noise of -86 dBc/Hz at 10 kHz offset. Fast frequency switching reaches 55 μ s for 100 MHz steps, with trigger response under 30 μ s. The instrument supports AM, FM, pulse, and phase modulation, including pulse widths as narrow as 10 ns (unleveled) and 100 ns (leveled). Internal time base stability tracks better than 2×10^{-8} /day with temperature

coefficients of $2 \times 10^{-8}/^{\circ}\text{C}$ over 0°C to 50°C . Multi-protocol connectivity USB 2.0, Ethernet, IEEE-488 GPIB, and RS-232 - combined with phase-locking capability for up to four synthesizers, positions the MG37022A for antenna characterization, satellite payload validation, RFIC/MMIC testing, and defense radar and EW receiver applications.

Technical Specifications

Frequency and Output Frequency range: 10 MHz to 20 GHz Output power: +19 dBm to -105 dBm (with step attenuator) Guaranteed output: +23 dBm at 20 GHz Power resolution: 0.01 dB Source impedance: $50\ \Omega$ nominal Source VSWR: $< 2.0:1$ typical Power level stability: $0.04\ \text{dB}/^{\circ}\text{C}$ typical Switching Performance Frequency switching: 100 μsec per point 100 MHz step switching: $< 55\ \mu\text{sec}$ (to within 1 kHz) Trigger response time: 30 μs typical Re-trigger time: 50 μs minimum Phase Noise & Stability Phase noise: -86 dBc/Hz at 10 kHz offset (guaranteed at 20 GHz) Internal time base stability (aging): $< 2 \times 10^{-8}/\text{day}$ Internal time base stability (temperature): $< 2 \times 10^{-8}/^{\circ}\text{C}$ over 0°C to 50°C Modulation Modes: AM, FM, Pulse, Phase Pulse configurations: single, double, triple, quadruple, burst Leveled pulse widths: down to 100 ns Unleveled pulse widths: down to 10 ns

Key Features Color touch screen user interface Windows XP environment Internal or external 10 MHz time base calibration External reference input: 10 MHz $\pm 50\ \text{Hz}$, 0 to +20 dBm 10 MHz reference output for daisy-chaining multiple units Phase-locking to four synthesizers simultaneously

Typical Applications Antenna testing and characterization Satellite payload testing RFIC and MMIC device validation Radar receiver testing EW receiver evaluation

Compatibility & Integration USB 2.0 host and device Ethernet LAN IEEE-488 GPIB RS-232 Serial I/O USB mouse, keyboard, and external VGA monitor support Compatible with Anritsu power meters, power sensors, signal analyzers, and spectrum analyzers

Features & description

From manufacturer datasheet

Features

- Typical 100 μ s per point frequency switching
- Standard 0.001 Hz frequency resolution
- Windows XP environment with USB, Ethernet, GPIB, RS-232
- Optional pulse modulation with internal multi-pulse generator
- Optional high power to +23 dBm at 20 GHz (Option 015)
- Optional mechanical 110 dB step attenuator (Option 002)
- Optional 10 MHz to 2.2 GHz DDC coverage (Option 004)
- List mode with four tables of 10001 points each

Applications

- Antenna and satellite payload frequency-agile testing
- High-throughput RFIC and MMIC manufacturing ATE
- Radar and EW receiver signal simulation
- Phase-tracked multi-synthesizer systems (Option 036)
- CW and step/list swept microwave stimulus to 20 GHz

High power Option 015 at 20 GHz: +23 dBm

Power setting resolution: 0.01 dB Power setting range class: about +30 dBm to -130 dBm (attenuator dependent) SSB phase noise at 10 GHz 10 kHz offset: -92 dBc/Hz (-105 dBc/Hz typical) Operating modes: CW and step sweep List tables: 4 tables x 10001 points Pulse leveled width Option 026 greater than 2 GHz: 100 ns Pulse unleveled width Option 026: 10 ns Pulse PRF class: DC to 10 MHz Step attenuator Option 002: 110 dB in 10 dB steps Remote interfaces: USB 2.0 device and host, Ethernet LAN, IEEE-488 GPIB, RS-232 AC power: 85 to 264 Vac, 48 to 440 Hz Power consumption: 250 VA maximum Package height class: 13.3 cm Depth class: about 45 cm Option 001: rack mount with slides Option 009: rear panel RF output Option 037: Performance Suite (Options 002, 004, 015, 026) Related brochure family: MG37020A / MG3702xA Datasheet part number class: 11410-00429 Notes Specs from Anritsu MG37020A/MG37022A product brochure and MG3702xA manuals. Base MG37022A is 2–20 GHz; confirm Option 004 before claiming 10 MHz start, and Option 015 before quoting +23 dBm.

MG37022A Characteristics / Specifications

PARAMETER	VALUE
Model	MG37022A
Manufacturer	Anritsu
Instrument Type	Fast Switching Microwave Signal Generator
Alias	MG37022A; Anritsu MG37022A
Base frequency range	2 GHz to 20 GHz
Extended frequency with Option 0	10 MHz to 20 GHz
Frequency resolution	0.001 Hz standard
Switching speed typical	100 μ s per point
Switching example 100 MHz step to within 1 kHz	less than 55 μ s class
Standard output power at 20 GHz	+17 dBm
High power Option 015 at 20 GHz	+23 dBm
Power setting resolution	0.01 dB
Power setting range class	about +30 dBm to -130 dBm (attenuator dependent)
SSB phase noise at 10 GHz 10 kHz offset	-92 dBc/Hz (-105 dBc/Hz typical)
Operating modes	CW and step sweep
List tables	4 tables x 10001 points
Pulse leveled width Option 026 greater than 2 GHz	100 ns
Pulse unleveled width Option 0	10 ns
Pulse PRF class	DC to 10 MHz
Step attenuator Option 0	110 dB in 10 dB steps
Remote interfaces	USB 2.0 device and host, Ethernet LAN, IEEE-488 GPIB, RS-232
AC power	85 to 264 Vac, 48 to 440 Hz
Power consumption	250 VA maximum
Package height class	13.3 cm

PARAMETER	VALUE
Depth class	about 45 cm
Related brochure family	MG37020A / MG3702xA
Datasheet part number class	11410-00429 Notes Specs from Anritsu MG37020A/MG37022A product brochure and MG3702xA manuals. Base MG37022A is 2–20 GHz; confirm Option 004 before claiming 10 MHz start, and Option 015 before quoting +23 dBm.

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	MG37022A
Manufacturer	Anritsu
Instrument Type	Fast Switching Microwave Signal Generator
Alias	MG37022A; Anritsu MG37022A
Base frequency range	2 GHz to 20 GHz
Extended frequency with Option 004	10 MHz to 20 GHz
Frequency resolution	0.001 Hz standard
Switching speed typical	100 µs per point

Switching example 100 MHz step to within 1 kHz: less than 55 µs class

Specifications

PARAMETER	VALUE
Standard output power at 20 GHz	+17 dBm
High power Option 015 at 20 GHz	+23 dBm
Power setting resolution	0.01 dB
Power setting range class	about +30 dBm to -130 dBm (attenuator dependent)

SSB phase noise at 10 GHz 10 kHz offset: -92 dBc/Hz (-105 dBc/Hz typical)
Operating modes: CW and step sweep
List tables: 4 tables x 10001 points
Pulse leveled width Option 026 greater than 2 GHz: 100 ns

Specifications

PARAMETER	VALUE
Pulse unlevelled width Option 026	10 ns
Pulse PRF class	DC to 10 MHz
Step attenuator Option 002	110 dB in 10 dB steps
Remote interfaces	USB 2.0 device and host, Ethernet LAN, IEEE-488 GPIB, RS-232
AC power	85 to 264 Vac, 48 to 440 Hz

PARAMETER	VALUE
Power consumption	250 VA maximum
Package height class	13.3 cm
Depth class	about 45 cm

Option 001: rack mount with slides
Option 009: rear panel RF output
Option 037: Performance Suite (Options 002, 004, 015, 026)
Related brochure family: MG37020A / MG3702xA
Datasheet part number class: 11410-00429

Notes
Specs from Anritsu MG37020A/MG37022A product brochure and MG3702xA manuals. Base MG37022A is 2–20 GHz;
confirm Option 004 before claiming 10 MHz start, and Option 015 before quoting +23 dBm.

Ordering Information

OPTION	DESCRIPTION
Option 015	at 20 GHz: +23 dBm
Option 026	greater than 2 GHz: 100 ns
Option 004	before claiming 10 MHz start, and Option 015 before quoting +23 dBm.

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.