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Data Sheet

August 13, 2026

ANRITSU

Anritsu MG3700A Vector Signal Generator, 250 KHz to 3 GHz

Anritsu MG3700A Vector Signal Generator 250 kHz to 3/6 GHz The Anritsu MG3700A is a vector signal generator with a built-in high-speed arbitrary waveform baseband generator (160 MHz sampling). Standard RF coverage is 250 kHz to 3 GHz, extendable to 6 GHz. It provides up to 120 MHz internal vector modulation bandwidth (150 MHz with external IQ), large ARB memory, waveform addition for wanted-plus-interference or AWGN tests, and a built-in BERT analyzer for digital radio, WLAN, LTE, WiMAX, ISDB-T, and GPS waveform patterns via IQproducer software. The Anritsu MG3700A is a vector signal generator with a built-in high-speed arbitrary waveform baseband generator (160 MHz sampling). Standard RF coverage is 250 kHz to 3 GHz, extendable to 6 GHz. It provides up to 120 MHz internal vector modulation bandwidth (150 MHz with external IQ), large ARB memory, waveform addition for wanted-plus-interference or AWGN tests, and a built-in BERT analyzer for digital radio, WLAN, LTE, WiMAX, ISDB-T, and GPS waveform patterns via IQproducer software.



MODEL

Anritsu MG3700A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MG3700A

LISTING

<https://aumictechlabs.com/products/mg3700a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu MG3700A is a vector signal generator delivering RF and wireless signal simulation across 250 kHz to 3 GHz, with optional extension to 6 GHz. Built around a 160 MHz sampling-rate arbitrary waveform generator, it produces complex modulation formats with high vector accuracy and phase noise of -125 dBc/Hz at 1 GHz. The instrument combines baseband generation (120 MHz modulation bandwidth internally; 150 MHz via external IQ input) with integrated BERT analysis up to 20 Mbps standard, making it suitable for R&D, manufacturing, and device validation in cellular, wireless LAN, and digital broadcast domains.

Technical Specifications

Frequency & Modulation Frequency range: 250 kHz to 3 GHz (standard); optional 6 GHz upper limit Modulation bandwidth: 120 MHz (internal); 150 MHz (external IQ) Frequency resolution: 0.01 Hz Phase noise: -125 dBc/Hz at 1 GHz Switching speed: 10 ms

Signal Generation Arbitrary waveform generator: 160 MHz sampling rate Waveform memory: 1 GB standard (256 Msamples/channel); 2 GB optional (512 Msamples/channel) Output power range: -140 dBm to $+13$ dBm Maximum output power: $+10$ dBm Absolute level accuracy: ± 0.5 dB; linearity ± 0.2 dB (typical)

Analysis & Storage Built-in BERT: 1 kbps to 20 Mbps (standard); 100 bps to 120 Mbps (optional) Hard disk: 40 GB Interface: 100BASE-TX Ethernet for high-speed waveform transmission

Key Features IQproducer™ waveform generation software PC-based tool for pattern creation across LTE/LTE-Advanced, WLAN, Mobile WiMAX, and other standards ASCII-to-waveform conversion from EDA tools (MATLAB, etc.)

Supported standard patterns: W-CDMA/HSDPA, GSM/EDGE, CDMA2000 1X/1xEV-DO, IEEE 802.11a/b/g, PDC, PHS, Bluetooth®, GPS, ISDB-T/BS/CS/CATV digital broadcast, and AWGN

Optional patterns: TD-SCDMA, Public Radio Systems (RCR STD-39, ARIB variants), DFS radar, ISDB-Tmm

Typical Applications Digital mobile communication system development and test; cellular device validation; wireless LAN equipment qualification; digital broadcast signal simulation.

Physical Benchtop form factor.

Features & description

From manufacturer datasheet

Features

• Frequency 250 kHz to 3 GHz standard; to 6 GHz option • Vector modulation bandwidth 120 MHz internal / 150 MHz external IQ • Absolute level accuracy plus or minus 0.5 dB • ARB memory 256 Msamples/channel standard; 512 Msamples option • Built in 40 GB hard disk • Waveform addition of two memories • Built in BERT 1 kbps to 20 Mbps standard • 100BASE-TX Ethernet waveform transfer

Applications

• Cellular LTE FDD/TDD and 3G receiver testing • WLAN IEEE 802.11 and Mobile WiMAX stimulus • Digital broadcast ISDB-T/ISDB-Tmm and GPS waveforms • Wanted signal plus AWGN or interferer addition tests • Baseband IQ generation and RF vector modulation • Built in BER analysis of demodulated streams

MG3700A Characteristics / Specifications

PARAMETER	VALUE
Model	MG3700A
Manufacturer	Anritsu
Instrument Type	Vector Signal Generator
Alias	MG3700A; Anritsu MG3700A
Frequency range standard	250 kHz to 3 GHz
Frequency range with 6 GHz option	250 kHz to 6 GHz
Frequency resolution	0.01 Hz
Internal reference frequency	10 MHz
Internal reference aging	plus or minus 1×10^{-8} /day
Internal reference aging year	plus or minus 1×10^{-7} /year
Internal reference temperature stability	plus or minus 2×10^{-8} from 0 to 50 C
Vector modulation bandwidth internal	120 MHz
Vector modulation bandwidth external IQ	150 MHz
Absolute level accuracy	plus or minus 0.5 dB
Level linearity typical	plus or minus 0.2 dB
Output level range CW electronic attenuator class	-140 to +13 dBm
Output level range CW mechanical attenuator option	-140 to +19 dBm
Output level resolution	0.01 dB
ARB sampling rate max	160 MHz
ARB memory standard	256 Msamples/channel (1 GB class)
ARB memory option	512 Msamples/channel (2 GB class)
Hard disk capacity	40 GB built in
BERT analyzer standard range	1 kbps to 20 Mbps
BERT analyzer option range	100 bps to 120 Mbps

PARAMETER	VALUE
RF output connector	N female 50 ohm
External reference input	5 MHz or 10 MHz auto switching
Buffered reference output	10 MHz TTL BNC
IQ output	differential D-Sub 15 rear panel
DimensionsWxHxD	426 mm x 177 mm x 451 mm
Ethernet transfer	100BASE-TX
Waveform software class	MX370xxx IQproducer family
Primary use	wideband vector modulated RF stimulus to 3/6 GHz
Related later platform	MG3710A/MG3710E class Notes Specs from Anritsu MG3700A Vector Signal Generator brochure (250 kHz–3/6 GHz; 120 MHz BW; ARB/BERT figures). Confirm frequency extension option, ARB memory option, mechanical attenuator, and installed waveform licenses on the unit.
Bandwidth	(150 MHz with external IQ), large ARB memory, waveform addition for wanted-plus-interference or AWGN tests, andabuilt-in BERT analyzer for digital radio, WLAN, LTE, WiMAX, ISDB-T, and GPS waveform patterns via IQproducer software.

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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Internal reference frequency	10 MHz
Internal reference aging	plus or minus 1 x 10^-8/day
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Internal reference temperature stability	plus or minus 2 x 10^-8 from 0 to 50 C
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Absolute level accuracy	plus or minus 0.5 dB
Level linearity typical	plus or minus 0.2 dB
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Notes

Specs from Anritsu MG3700A Vector Signal Generator brochure (250 kHz–3/6 GHz; 120 MHz BW; ARB/BERT figures). Confirm frequency extension option, ARB memory option, mechanical attenuator, and installed waveform licenses 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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.