

ANRITSU

MG3671A

The Anritsu MG3671A is a high-performance digital modulation signal generator designed for the development, testing, and evaluation of digital mobile communications equipment. Operating across a wide frequency range from 300 kHz to 2.75 GHz, the MG3671A features a built-in high-performance quadrature modulator and provides exceptionally stable output power alongside excellent spectral purity. It supports flexible multi-system testing through up to eight simultaneous modulation units and a burst function unit expansion capability.

SPECIFICATIONS

Frequency

Minimum Frequency	300 kHz Hz
Maximum Frequency	2.75 GHz Hz
Frequency Resolution	0.01 Hz

Output

Maximum Output Power	+13 dBm dBm
Output Power Range	-143 to +13 dBm
Phase Noise	<-130 dBc/Hz (at 1 GHz carrier, 20 kHz offset)

Modulation

Modulation	Digital I/Q (External CMOS-level input, optional internal modulation units)
Sweep Modes	Frequency, Amplitude
Vector Modulation Distortion (EVM)	<= 2% rms (pi/4 DQPSK)
Vector Modulation Phase Error	<= 2 deg rms (GMSK)

General

Reference Oscillator	10 MHz (Internal Reference Stability: < 2 x 10 ⁻⁸ /day, option dependent)
Interfaces	GPIO (IEEE-488.2)
Display	LCD with Backlight

Physical

Power Supply	85 to 265 VAC, 47.5 to 63 Hz
Dimensions (W×H×D)	426 mm × 177 mm × 451 mm mm
Weight	22 kg kg

Frequency Specifications

Frequency Range	300 kHz to 2.75 GHz
Internal Reference Frequency	10 MHz

Amplitude Specifications

Minimum Output Power	-143 dBm
Amplitude Resolution	0.1 dB
Output Impedance	50 ohms

Spectral Purity

SSB Phase Noise	<-130 dBc/Hz (at 1 GHz, 20 kHz offset)
Harmonic Spurious	< -30 dBc (output level <= +7 dBm)
Non-Harmonic Spurious	< -50 dBc (300 kHz to 1.0 GHz), < -45 dBc (1.0 to 2.0 GHz), < -40 dBc (2.0 to 2.75 GHz) at >= 10 kHz offset

Vector Modulation and Baseband

Modulation Input	External I/Q (Analog, BNC connectors)
Expansion Capabilities	Up to 8 modulation units and 1 burst function unit simultaneously

System Connectivity and Interfaces

RF Output Connector	N-type (female)
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Power Requirements

Line Voltage	85 V to 265 V AC
Line Frequency	47.5 Hz to 63 Hz

RF Output

Output VSWR	< 1.5 (300 kHz to 2.0 GHz, output level <= 0 dBm), < 2.0 (2.0 to 2.75 GHz, output level <= 0 dBm)
Output Level Accuracy (>= -110 dBm)	+/-1.0 dB (300 kHz to 2.0 GHz), +/-1.5 dB (2.0 to 2.75 GHz)

Power Supply

Power Consumption	<= 350 VA
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Environmental

Operating Temperature Range	0 to +50 deg C
Storage Temperature Range	-20 to +60 deg C

External I/Q Modulation

External I/Q Input Impedance	50 Ω
External I/Q Input Level	0.5 V peak (for full scale)

Pulse Modulation (Option 02)

Pulse Modulation ON/OFF Ratio	> 80 dB (with Option 02)
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Reference Oscillator

Reference Aging Rate (Standard)	< 1 × 10 ⁻⁶ /year
Reference Aging Rate (Option 01)	< 5 × 10 ⁻¹⁰ /day
Reference Temperature Stability (Standard)	< 2 × 10 ⁻⁶ (0 °C to 50 °C)
Reference Temperature Stability (Option 01)	< 5 × 10 ⁻⁹ (0 °C to 50 °C)

Burst Modulation

Burst ON/OFF Ratio	> 80 dB
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Memory

Save/Recall Registers	100 settings
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TECHNOLOGY

Digital RF Modulation

APPLICATIONS

Digital Mobile Communications Testing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.