

# Quick Fact Sheet

## Rubidium™ MG362x1A

### Low Noise RF/Microwave Signal Generator

9 kHz to 20/43.5 GHz

**Anritsu**  
Advancing beyond

Signal purity and frequency stability are essential distinguishing characteristics of a high frequency microwave signal generator. The Rubidium MG362x1A signal generator product line is built to deliver outstanding signal purity and frequency stability across a broad frequency range of 9 kHz to 43.5 GHz, even at high output power levels. Coupled with built-in, easy-to-use, at location frequency and power calibration capability, the low noise RF/microwave signal generator Rubidium MG362x1A offers exceptional overall utility and long term value for a broad range of measurement applications.

The Rubidium MG362x1A standard phase noise outperforms competition by a substantial margin. Two additional tiers of phase noise performance on top of the standard phase noise performance are offered as options. The low phase noise option delivers improved close in phase noise along with better frequency stability. The ultra low phase noise option provides improved phase noise at higher offsets. For CW only applications between 2 GHz to 20 GHz, Rubidium provides an even lower phase noise than the ultra low phase noise option, allowing for another 3 dB improvement on a separate RF output port at the back panel.

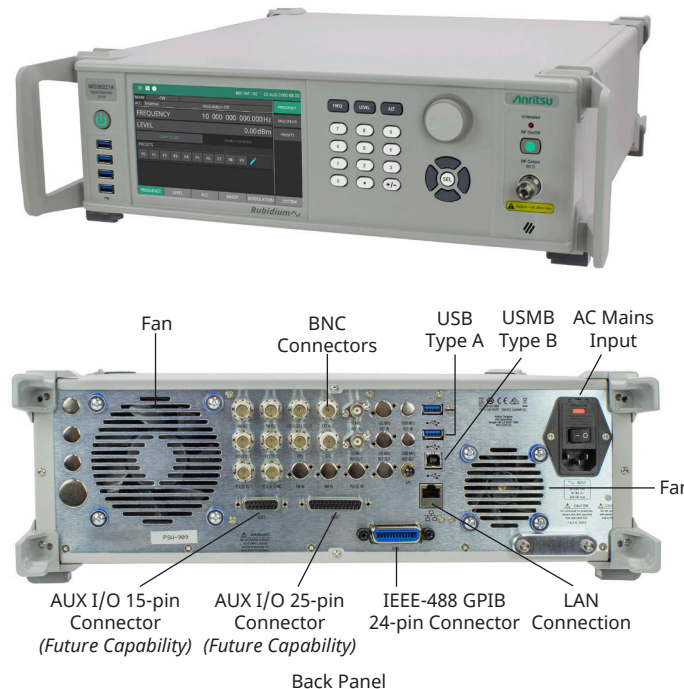
The low noise RF/microwave signal generator Rubidium MG362x1A offers atomic clock frequency stability with an internal rubidium frequency reference option. Alternatively, customers can get exceptional frequency stability by locking an internal oven controlled crystal (OCXO) reference to an external GNSS signal. The exceptional frequency stability coupled with low phase noise performance makes the Rubidium MG362x1A the ideal choice for many measurement applications.

The Rubidium MG362x1A modulation capabilities include amplitude, frequency, phase, and pulse modulation to address simple to complex signal simulation requirements. It offers very comprehensive pulse generation capabilities to test pulsed radar systems. It also supports Anritsu's True-RMS and CW power sensors.

The Rubidium MG362x1A is housed in a 3U chassis with a 7-inch touch screen on the front panel and traditional keypad/dial interface. The Rubidium MG362x1A offers a high degree of configurability through a wide range of options to achieve optimum cost to function tradeoffs for the customers.

## Key Benefits and Features

- Industry leading phase noise and spurious performance across broad frequency range
- Atomic clock frequency stability with optional internal rubidium frequency reference
- High output power with low spurious eliminates need for external power amplification
- Convenience and increased instrument availability with built-in, on-site frequency and power calibration capability (Optional)
- Pulsed radar signal simulation with comprehensive narrow pulse generation capability



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#### Key Specifications

Model No	Frequency Coverage	Output
MG36221A	9 kHz to 20 GHz	K(m) 2.92 mm
MG36241A	9 kHz to 43.5 GHz	K(m) 2.92 mm

#### Phase Noise Options

Option No	Description
MG362x1A-0003	Low Phase Noise and High Stability (Required for Option 13)
MG362x1A-0013	Ultra Low Phase Noise (Requires Option 3)

#### Stable Time Base and High Power Options

Option No	Description
MG362x1A-0015	High Power Output
MG362x1A-0066	GNSS Atomic Clock Receiver (Requires Options 3 or 13)
MG362x1A-0056	Ultra Stability Time Base (Requires Option 3 or 13)

#### Modulation Options

Option No	Description
MG362x1A-0012	Amplitude, Frequency, and Phase Modulation, Internal/External (Requires Option 27)
MG362x1A-0026	Pulse Modulation, Internal/External (Requires Option 27)
MG362x1A-0027	Modulation Hardware (Requires Option 12, 26, or Both for Functionality)
MG362x1A-0029	Front Panel Modulation Input/Output Access (Requires Option 27)

#### In Field Calibration

Option No	Description
MG362x1A-0018	On-Site Level and Frequency Calibration (Requires Option 66 and MA24330A/MA24350A USB Power Sensor, Sold Separately)
MA24330A	Microwave CW USB Power Sensor (Recommended with the MG36221A, 20 GHz)
MA24350A	Microwave CW USB Power Sensor (Recommended with the MG36241A 43.5 GHz)