

ROHDE & SCHWARZ

AM300

The Rohde & Schwarz AM300 is a dual-channel Arbitrary/Function Waveform Generator designed for high functionality and spectral purity. Featuring a 100 MSa/s sampling rate, 14-bit vertical resolution, and 256K-point waveform memory per channel, it excels in generating high-quality, low-distortion analog signals for lab, production, and service applications.

SPECIFICATIONS

General

Interfaces	USB
Display	3.5" color TFT LCD (320 × 240 pixels)

Physical

Power Supply	100 V to 240 V AC (±10%), 50 Hz to 60 Hz
Operating Temperature	+5 °C to +40 °C °C
Dimensions (W×H×D)	222 mm × 140 mm × 324 mm mm
Weight	3.2 kg

Channel Characteristics

Number of Channels	2
Channel Coupling	Precise phase-coupled channels
Phase Relation	Precise phase relation between signals
I/Q Signal Generation	Supports generation of analog I/Q signals for RF modulator input (e.g. R&S SM300)

Waveform Generation

Standard Waveforms	Sine, triangle, ramp, exponential, square, noise, pulse
Sampling Rate	Up to 100 MSa/s
Vertical Resolution	14 Bit
Waveform Memory Capacity	256K-point (262,144 points) per channel
Software Support	Waveform Composer Software

Frequency Specifications

Sine Frequency Range	Upper limit 35 MHz
Square Frequency Range	Upper limit 25 MHz

Modulation, Sweep, and Burst

Modulation Types	AM, FM, ϕ M, FSK, PSK
Sweep Function	Supported
Burst Function	Supported
Gate Function	Supported

Amplitude and Output Characteristics

Output Impedance	50 Ω
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Output Characteristics

Output Amplitude Range	10 mVpp to 10 Vpp (into 50 Ω), 20 mVpp to 20 Vpp (open circuit)
DC Offset Range	± 5 V (into 50 Ω), ± 10 V (open circuit)
Square Rise/Fall Time	< 12 ns

Frequency Characteristics

Pulse Frequency Range	100 μ Hz to 25 MHz
Triangle/Ramp Frequency Range	100 μ Hz to 500 kHz
Frequency Resolution	100 μ Hz

Inputs & Outputs

External Reference Input	10 MHz
Sync Outputs	2 $\times$ BNC (rear panel), TTL-compatible
External Trigger Input	1 $\times$ BNC (rear panel), TTL-compatible
External Reference Input Frequency	10 MHz
External Modulation Inputs	2 $\times$ BNC (rear panel), 10 k Ω m input impedance, ± 2.5 V full scale

Environmental

Storage Temperature Range	-25 $^{\circ}$ C to +70 $^{\circ}$ C
Operating Altitude	up to 2000 m
Warm-up Time	20 minutes

Signal Specifications

Arbitrary Waveform Length	4 to 262,144 points
Sine Wave Distortion (THD)	< -60 dBc (typical at 1 MHz, 1 Vpp)
Sine Wave Spurious (non-harmonic)	< -70 dBc (typical at 1 MHz, 1 Vpp)
Phase Noise	< -115 dBc/Hz (at 10 kHz offset, 10 MHz carrier)
Pulse Width Range	15 ns to 999 s
Pulse Width Resolution	10 ns or 4 digits

Power Requirements

Nominal Input Voltage	100 V to 240 V AC (±10%)
Input Frequency Range	47 Hz to 63 Hz
Maximum Power Consumption	40 VA

TECHNOLOGY

Arbitrary Waveform Generator (AWG)

APPLICATIONS

Lab, production, and service testing; analog I/Q signal generation for RF modulation

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