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Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz AM300 2 Ch Arbitrary Waveform Generator

Rohde & Schwarz AM300 Arbitrary and Function Generator Two Channel The R&S AM300 is a two-channel arbitrary and function generator (order 1147.1498.03). Vertical resolution is 14 bit with sample rate to 100 MSa/s and 16 to 262144 (256 k) points per channel. Sine covers 10 μ Hz to 35 MHz; square low-jitter to 50 MHz; pulse to 16.667 MHz; triangle/ramp/exponential to 500 kHz; noise 35 MHz bandwidth. AM, FM, ϕ M, FSK, and PSK modulation, sweep, gate, and channel coupling support baseband and analog stimulus. Often paired with SM300 as an I/Q baseband source. The R&S AM300 is a two-channel arbitrary and function generator (order 1147.1498.03). Vertical resolution is 14 bit with sample rate to 100 MSa/s and 16 to 262144 (256 k) points per channel. Sine covers 10 μ Hz to 35 MHz; square low-jitter to 50 MHz; pulse to 16.667 MHz; triangle/ramp/exponential to 500 kHz; noise 35 MHz bandwidth. AM, FM, ϕ M, FSK, and PSK modulation, sweep, gate, and channel coupling support baseband and analog stimulus. Often paired with SM300 as an I/Q baseband source.



MODEL

Rohde & Schwarz AM300

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

AM300

LISTING

<https://aumictechlabs.com/products/am300-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Rohde & Schwarz AM300 is a 2-channel arbitrary waveform generator that combines the functionality of an arbitrary generator, function generator, and I/Q signal generator in a single

instrument. It delivers custom waveforms with high signal fidelity and supports AM, FM, PM, FSK, and PSK modulation, making it suitable for research, development, production, service, and educational applications.

Technical Specifications

Channels: 2 Sampling Rate: Up to 100 MSa/s
Waveform Memory: 256 k-point per channel Vertical Resolution: 14 bits
Frequency Range (Sine Wave): Up to 35 MHz
Frequency Range (Square Wave): Up to 50 MHz
Frequency Range (Triangle, Ramp, Exponential): Up to 500 kHz
Minimum Frequency: 10 μ Hz
Harmonic Suppression (Sine @ 1 MHz): Typically 70 dB
Phase Shift Range: -180° to $+180^\circ$ (0.01° resolution)
Reference Oscillator Stability: 1 ppm/year
Clock Jitter: Low jitter, up to 50 MHz

Key Features

Standard waveforms include sine, triangle, ramp, square, exponential, noise, and pulse
Arbitrary waveform creation via optional Waveform Composer software with segment-based definition
Import compatibility with multiple data formats including oscilloscope recordings and Matlab/Mathcad outputs
Waveform linking through addition, multiplication, division, and subtraction operations
Analog I/Q signal generation with precisely matched phase between channels
Support for I/Q baseband generation in digital transmission applications
Modulation types: AM, FM, PM, FSK, PSK
Burst, gating, and sweep functions
Dual-channel independent frequency, waveform, and amplitude control
Large color TFT display with zoom capability
Menu-controlled operation via keypad and rotary knob
USB interface for remote control and file management

Typical Applications

Ideal for signal simulation, component testing, protocol verification, and educational demonstration in RF and baseband signal processing environments.

Compatibility & Integration

Supports external modulation by RF signal generators such as the Rohde & Schwarz SM300. Operates in coupled-frequency mode (phase-locked) or decoupled-frequency mode. USB connectivity enables PC integration and waveform data exchange.

Features & description

From manufacturer datasheet

Features

- Channel modes CH1, CH2, CH1+CH2
- Phase minus 180 to +180 degrees, 0.01 degree resolution
- PC software (Wave class) for user waveforms
- Modulation frequency 10 mHz to 100 kHz; AM depth 0 to 100 percent, 0.1 percent
- Compact AM300 family chassis

Applications

- Dual-channel analog function and arbitrary waveforms
- Modulation (AM/FM/ ϕ M/FSK/PSK) of standard and arbitrary carriers
- Swept and gated stimulus
- Baseband I/Q companion to SM300
- Pulse and low-jitter square clocks

AM300 Characteristics / Specifications

PARAMETER	VALUE
Model	AM300
Manufacturer	Rohde & Schwarz
Instrument Type	Arbitrary and function generator
Alias	AM 300; R&S AM300
Order Number	1147.1498.03
Channels	2
Vertical Resolution	14 bit
Arbitrary Length	16 to 262144 points per channel
Sample Frequency	10 μ Hz to 100 MHz
Frequency Resolution	10 μ Hz
Sine Range	10 μ Hz to 35 MHz
Triangle Ramp Square Exponential	10 μ Hz to 500 kHz
Square Low Jitter	10 μ Hz to 50 MHz
Noise Bandwidth	35 MHz
Pulse Range	10 μ Hz to 16.667 MHz
Arbitrary Repetition 16 Points	max 6.25 MHz
Phase Range	minus 180 to +180 degrees
Phase Resolution	0.01 degree
Duty Cyclefless than or equal to 500 kHz	1 percent to 99 percent class
Pulse Width	20 ns class to 9999 s class
Pulse Rise Time	less than 10 ns
Overshoot	less than 5 percent
Ramp Symmetry	0 percent to 100 percent
Modulation Types	AM, FM, phiM, FSK, PSK
Modulation Waveforms	sine, square, triangle, ramp, exponential, noise

PARAMETER	VALUE
Modulation Frequency	10 mHz to 100 kHz
AM Depth	0 to 100 percent, resolution 0.1 percent
Operating Modes	standard waveforms, arbitrary, sweep, trigger/gate, coupling
Companion RF	SM300 9 kHz to 3 GHz
Form Factor	compact two-channel generator Notes Specs from the R&S AM300 operating manual specifications. Confirm channel coupling and loaded arbitrary files. Pair with SM300 only when I/Q baseband is required.
Bandwidth	35 MHz
Rise Time	less than 10 ns

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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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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<https://aumictechlabs.com>

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.