

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 3, 2026

ROHDE & SCHWARZ

Rohde & Schwarz SMGU

Rohde & Schwarz SMGU High Performance Synthesized Signal Generator 100 kHz – 2160 MHz

The SMGU provides a Rohde & Schwarz high-performance synthesized RF signal generator covering 100 kHz to 2160 MHz. Dealer and specification summaries highlight high spectral purity, fine frequency resolution, wide level range, AM/FM/pulse modulation, and digital/analog sweep. An OCXO reference option class supports high timebase stability. General-purpose RF stimulus to 2.16 GHz; receiver testing; LO substitution; modulated RF generation; swept measurements. The SMGU provides a Rohde & Schwarz high-performance synthesized RF signal generator covering 100 kHz to 2160 MHz. Dealer and specification summaries highlight high spectral purity, fine frequency resolution, wide level range, AM/FM/pulse modulation, and digital/analog sweep. An OCXO reference option class supports high timebase stability. General-purpose RF stimulus to 2.16 GHz; receiver testing; LO substitution; modulated RF generation; swept measurements.

No photo

MODEL

**Rohde & Schwarz
SMGU**

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

SMGU

LISTING

**Off-catalog — OEM dat
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

Features & description

From manufacturer datasheet

Features

- Frequency: 100 kHz to 2160 MHz • Frequency resolution: 0.1 Hz • Frequency switching time: approximately 10 ms (published summaries) • Output level: approximately -140 dBm to +13 dBm • Output impedance: 50 Ω • Level switching time: approximately 25 ms • Modulation: AM, FM, pulse • Sweep: auto / manual / single; digital & analog sweep • Spectral purity class: harmonics about -30 dBc; nonharmonics about -94 dBc (published summaries) • SSB phase noise class: about -128 to -150 dBc/Hz depending on offset/conditions (published summaries) • External 10 MHz reference; OCXO reference option class • Timebase stability class: on the order of 1×10^{-9} / day (published summaries)

SMGU Characteristics / Specifications

PARAMETER	VALUE
Model	SMGU
Manufacturer	Rohde & Schwarz
Instrument Type	Synthesized Signal Generator
Alias	SMGU; R&S SMGU Frequency
Minimum	100 kHz
Maximum	2160 MHz
Resolution	0.1 Hz
Switching Time	~10 ms (published) Level
Minimum Output Power	–140 dBm
Maximum Output Power	+13 dBm
Output Impedance	50 Ω
Level Switching Time	~25 ms (published) Modulation / Sweep AM, FM, Pulse
Sweep Modes	Auto, Manual, Single Digital and analog sweep capability
Spectral Purity (published summary values)	confirm against R&S SMGU data sheet for guaranteed limits)
Harmonics	–30 dBc class
Nonharmonics	–94 dBc class
SSB Phase Noise	–128 dBc/Hz (max class) to –150 dBc/Hz (min class) depending on conditions Reference
External Frequency Reference	10 MHz OCXO reference option available on many SMGU configurations Form Factor Benchtop Standard Operating Conditions Use 50 Ω loads. Verify installed options (OCXO, modulation) on the rear/option labels. Operational Notes
Frequency	100 kHz to 2160 MHz
Frequency resolution	0.1 Hz
Frequency switching time	approximately 10 ms (published summaries)
Output level	approximately –140 dBm to +13 dBm

PARAMETER	VALUE
Modulation	AM, FM, pulse
Sweep	auto / manual / single; digital & analog sweep
Spectral purity class	harmonics about -30 dBc; nonharmonics about -94 dBc (published summaries)
SSB phase noise class	about -128 to -150 dBc/Hz depending on offset/conditions (published summaries)
Timebase stability class	on the order of 1×10^{-9} / day (published summaries)

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.

Performance Synthesized Signal Generator 100 kHz – 2160 MHz

Overview

The SMGU provides a Rohde & Schwarz high-performance synthesized RF signal generator covering 100 kHz to 2160 MHz. Dealer and specification summaries highlight high spectral purity, fine frequency resolution, wide level range, AM/FM/pulse modulation, and digital/analog sweep. An OCXO reference option class supports high timebase stability.

Applications

General-purpose RF stimulus to 2.16 GHz; receiver testing; LO substitution; modulated RF generation; swept measurements.

Key Features

- Frequency: 100 kHz to 2160 MHz
- Frequency resolution: 0.1 Hz
- Frequency switching time: approximately 10 ms (published summaries)
- Output level: approximately -140 dBm to +13 dBm
- Output impedance: 50 Ω
- Level switching time: approximately 25 ms
- Modulation: AM, FM, pulse
- Sweep: auto / manual / single; digital & analog sweep
- Spectral purity class: harmonics about -30 dBc; nonharmonics about -94 dBc (published summaries)
- SSB phase noise class: about -128 to -150 dBc/Hz depending on offset/conditions (published summaries)
- External 10 MHz reference; OCXO reference option class
- Timebase stability class: on the order of 1×10⁻⁹ / day (published summaries)

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	SMGU
Manufacturer	Rohde & Schwarz
Instrument Type	Synthesized Signal Generator
Alias	SMGU; R&S SMGU

Frequency

Frequency

PARAMETER	VALUE
Minimum	100 kHz
Maximum	2160 MHz
Resolution	0.1 Hz
Switching Time	~10 ms (published)

Level

Specifications

PARAMETER	VALUE
Minimum Output Power	-140 dBm
Maximum Output Power	+13 dBm
Output Impedance	50 Ω
Level Switching Time	~25 ms (published)

Modulation / Sweep
AM, FM, Pulse
Sweep Modes: Auto, Manual, Single
Digital and analog sweep capability

Specifications

PARAMETER	VALUE
Spectral Purity (published summary values)	confirm against R&S SMGU data sheet for guaranteed limits)
Harmonics	-30 dBc class
Nonharmonics	-94 dBc class
SSB Phase Noise	-128 dBc/Hz (max class) to -150 dBc/Hz (min class) depending on conditions

Reference
External Frequency Reference: 10 MHz
OCXO reference option available on many SMGU configurations

Form Factor
Benchtop

Standard Operating Conditions
Use 50 Ω loads. Verify installed options (OCXO, modulation) on the rear/option labels.

Operational Notes
Prefer the official R&S SMGU data sheet for guaranteed phase-noise vs offset and level accuracy when available for the exact option set. Catalog frequency span 100 kHz-2160 MHz defines this listing.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 3, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.