

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz SML03 9KHz-3.3GHz Synthesised Signal Generator

Rohde & Schwarz SML03 Signal Generator 9 kHz to 3.3 GHz The R&S SML03 is the 3.3 GHz economy analog signal generator in the SML family (SML01 to 1.1 GHz, SML02 to 2.2 GHz, SML03 to 3.3 GHz). Order number 1090.3000.13. Wear free electronic attenuator, 0.1 Hz resolution, AM/FM/phase as standard, digital frequency and level sweep, and optional pulse modulator SML B3 and stereo/RDS coder SML B5. Typical SSB phase noise minus 128 dBc (1 Hz) at 1 GHz, 20 kHz offset. Receiver sensitivity and squelch; production ATE; EMS with non interrupting level; FM stereo/RDS with SML B5 and UPL audio analyzer; LO substitution; pager and transceiver service. The R&S SML03 is the 3.3 GHz economy analog signal generator in the SML family (SML01 to 1.1 GHz, SML02 to 2.2 GHz, SML03 to 3.3 GHz). Order number 1090.3000.13. Wear free electronic attenuator, 0.1 Hz resolution, AM/FM/phase as standard, digital frequency and level sweep, and optional pulse modulator SML B3 and stereo/RDS coder SML B5. Typical SSB phase noise minus 128 dBc (1 Hz) at 1 GHz, 20 kHz offset. Receiver sensitivity and squelch; production ATE; EMS with non interrupting level; FM stereo/RDS with SML B5 and UPL audio analyzer; LO substitution; pager and transceiver service.



MODEL

Rohde & Schwarz SML03

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

SML03

LISTING

<https://aumictechlabs.com/products/sml03-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Rohde & Schwarz SML03 is a synthesized signal generator covering 9 kHz to 3.3 GHz, engineered for RF and microwave testing in development, service, and production environments. It delivers high-precision signals with superior spectral purity and fast settling times, making it ideal for automatic test systems and complex signal simulation.

Technical Specifications

Frequency Range: 9 kHz to 3.3 GHz Resolution: 0.1 Hz Setting time: < 10 ms Output Power Range:

–140 dBm to +13 dBm Resolution: 0.1 dB Level accuracy: –120 dBm) Switching time: < 10 ms

Spectral Performance SSB phase noise: –128 dBc (1 Hz) at 1 GHz, $\Delta f = 20$ kHz (typical) Spurious

suppression: –76 dBc (typical) Broadband noise: –150 dBc (1 Hz) (typical) Modulation Standard

modes: AM, FM, phase modulation Simultaneous modulation: AM, FM/ ϕ M, and pulse modulation

(pulse modulator module optional) Digital frequency and level sweep functions Interfaces &

Control GPIB and RS-232 Auto-ranging AC input: 100–120 V or 200–240 V, 50–60 Hz Physical &

Reliability Form factor: 2U benchtop Electronic attenuator for high reliability 3-year calibration

cycle supported CE, UL compliant; meets DIN EN 61010-1, IEC 1010-1, UL 3111-1, CSA 22.2 No.

1010-1

Key Features Fast frequency and level settling (< 10 ms) for rapid test cycles 0.1 Hz

frequency resolution enables precise tuning and narrow-band testing Simultaneous AM, FM,

phase, and pulse modulation for TDMA and complex signal simulation Optional OCXO reference

oscillator (SML-B1) for enhanced frequency stability Optional pulse modulator (SML-B3) with

integrated pulse generator Optional stereo/RDS coder (SML-B5) with analog and digital audio

inputs

Typical Applications Radio receiver and transceiver development and servicing Automated

production test systems Frequency response and sensitivity measurements Modulation quality

testing in TDMA and multi-mode systems Audio and broadcast equipment validation

Compatibility & Integration The SML03 integrates into versatile automatic test systems as a flexible signal

source. Optional pairing with the Audio Analyzer UPL and Audio Switcher UPZ enables

comprehensive audio testing workflows.

SML03 Characteristics / Specifications

PARAMETER	VALUE
Model	SML03
Manufacturer	Rohde & Schwarz
Instrument Type	Analog RF Signal Generator
Alias	R&S SML03; 1090.3000.13
Frequency Range	9 kHz to 3.3 GHz
Frequency Resolution	0.1 Hz
Synthesis Resolution Standardfless than 1.1 GHz	less than 0.5 uHz
Frequency Setting Time	less than 10 ms after IEC delimiter
Level Range	minus 140 dBm to plus 13 dBm (overrange plus 19 dBm)
Level Rangeless than or equal to 5 MHz orfgreater than 3 GHz	minus 140 dBm to plus 11 dBm
Level Resolution	0.1 dB
Level Accuracy 100 kHz to 2 GHz levels greater than minus 120 dBm	less than 0.5 dB
Level Accuracyfgreater than 2 GHz	less than 0.9 dB
Frequency Response 100 kHz to 2 GHz at 0 dBm	less than 0.7 dB
Frequency Responsefgreater than 2 GHz	less than 1.0 dB
Characteristic Impedance	50 ohm
VSWR 100 kHz to 1.5 GHz	typically 1.6
VSWRfgreater than 1.5 GHz	typically 2.3
Noninterrupting Level Range	20 dB, overrange 30 dB
Harmonicsfgreater than 100 kHz levels less than or equal to plus 8 dBm	less than minus 30 dBc
Subharmonicsfless than or equal to 1.1 GHz	none
Subharmonicsfgreater than 1.1 GHz	less than minus 50 dBc

PARAMETER	VALUE
Nonharmonics less than or equal to 1.1 GHz offset greater than 10 kHz	less than minus 70 dBc
Nonharmonics 1.1 to 2.2 GHz	less than minus 64 dBc
Nonharmonics 2.2 to 3.3 GHz	less than minus 58 dBc
Broadband Noise 1 GHz offset greater than 2 MHz 1 Hz BW	less than minus 140 dBc, typically minus 150 dBc
SSB Phase Noise 1 GHz 20 kHz Offset 1 Hz BW	less than minus 122 dBc, typically minus 128 dBc
Residual FM rms 0.3 to 3 kHz equals 1 GHz	less than 4 Hz, typically 1 Hz
Residual AM rms 0.03 to 20 kHz	less than 0.02 percent
AM Depth	0 to 100 percent, resolution 0.1 percent
AM Distortion 1 kHz equals 30 percent	less than 1 percent
FM Max Deviation 2.655 to 3.300 GHz	0 to 4 MHz
FM Distortion 1 kHz 50 percent max deviation	less than 0.2 percent, typically 0.1 percent
Pulse On Off Ratio SML B	greater than 90 dB
Pulse Rise Fall SML B	less than 20 ns, typically 10 ns
Max Reverse RF less than or equal to 2.2 GHz	50 W
Max Reverse RF greater than 2.2 GHz	25 W
Max DC Voltage	35 V
Internal AF Generator	0.01 Hz to 1 MHz
Mains	100 to 120 V 50 to 400 Hz or 200 to 240 V 50 to 60 Hz, max 200 VA
Dimensions	427 mm x 88 mm x 450 mm
Weight Fully Equipped	8.5 kg
Stored Setups	100
Reference Aging Standard	less than 1e-6 per year
OCXO SML B1 Aging	less than 1e-7 per year or less than 5e-10 per day Notes Specs from R&S SML data sheet Version 06.00. SML03 is analog only; SMV03 adds the I/Q modulator on the same RF platform. Confirm SML

PARAMETER

VALUE

B1/B3/B5/B19 and high power SML B10 if present (B10 raises level to plus 23 dBm class).

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	
Specifications	
PARAMETER	VALUE
Max DC Voltage	35 V
Internal AF Generator	0.01 Hz to 1 MHz
Mains	100 to 120 V 50 to 400 Hz or 200 to 240 V 50 to 60 Hz, max 200 VA
Dimensions	427 mm x 88 mm x 450 mm
Weight Fully Equipped	8.5 kg
Stored Setups	100
Reference Aging Standard	less than 1e-6 per year
OCXO SML B1 Aging	less than 1e-7 per year or less than 5e-10 per day
Technical Specifications	
PARAMETER	VALUE
Model	SML03
Manufacturer	Rohde & Schwarz
Instrument Type	Analog RF Signal Generator
Alias	R&S SML03; 1090.3000.13
Frequency Range	9 kHz to 3.3 GHz
Frequency Resolution	0.1 Hz
Specifications	
PARAMETER	VALUE
Model	SML03
Manufacturer	Rohde & Schwarz
Instrument Type	Analog RF Signal Generator
Alias	R&S SML03; 1090.3000.13
Frequency Range	9 kHz to 3.3 GHz
Frequency Resolution	0.1 Hz

PARAMETER	VALUE
Synthesis Resolution Standardfless than 1.1 GHz	less than 0.5 uHz
Frequency Setting Time	less than 10 ms after IEC delimiter
Level Range	minus 140 dBm to plus 13 dBm (overrange plus 19 dBm)

Level Rangeless than or equal to 5 MHz orfgreater than 3 GHz: minus 140 dBm to plus 11 dBm
Level Resolution: 0.1 dB
Level Accuracy 100 kHz to 2 GHz levels greater than minus 120 dBm: less than 0.5 dB
Level Accuracyfgreater than 2 GHz: less than 0.9 dB
Frequency Response 100 kHz to 2 GHz at 0 dBm: less than 0.7 dB

Specifications

PARAMETER	VALUE
Frequency Responsefgreater than 2 GHz	less than 1.0 dB
Characteristic Impedance	50 ohm
VSWR 100 kHz to 1.5 GHz	typically 1.6
VSWRfgreater than 1.5 GHz	typically 2.3
Noninterrupting Level Range	20 dB, overrange 30 dB

Harmonicsfgreater than 100 kHz levels less than or equal to plus 8 dBm: less than minus 30 dBc
Subharmonicsfless than or equal to 1.1 GHz: none
Subharmonicsfgreater than 1.1 GHz: less than minus 50 dBc
Nonharmonicsfless than or equal to 1.1 GHz offset greater than 10 kHz: less than minus 70 dBc
Nonharmonics 1.1 to 2.2 GHz: less than minus 64 dBc
Nonharmonics 2.2 to 3.3 GHz: less than minus 58 dBc
Broadband Noise 1 GHz offset greater than 2 MHz 1 Hz BW: less than minus 140 dBc, typically minus 150 dBc
SSB Phase Noise 1 GHz 20 kHz Offset 1 Hz BW: less than minus 122 dBc, typically minus 128 dBc
Residual FM rms 0.3 to 3 kHzfequals 1 GHz: less than 4 Hz, typically 1 Hz

Specifications

PARAMETER	VALUE
Residual AM rms 0.03 to 20 kHz	less than 0.02 percent
AM Depth	0 to 100 percent, resolution 0.1 percent
AM Distortion 1 kHzmequals 30 percent	less than 1 percent
FM Max Deviation 2.655 to 3.300 GHz	0 to 4 MHz

FM Distortion 1 kHz 50 percent max deviation: less than 0.2 percent, typically 0.1 percent
Pulse On Off Ratio SML B3: greater than 90 dB
Pulse Rise Fall SML B3: less than 20 ns, typically 10 ns
Max Reverse RFfless than or equal to 2.2 GHz: 50 W

Specifications

PARAMETER	VALUE
Max Reverse RFfgreater than 2.2 GHz	25 W

PARAMETER	VALUE
Max DC Voltage	35 V
Internal AF Generator	0.01 Hz to 1 MHz
Mains	100 to 120 V 50 to 400 Hz or 200 to 240 V 50 to 60 Hz, max 200 VA
Dimensions	427 mm x 88 mm x 450 mm
Weight Fully Equipped	8.5 kg
Stored Setups	100
Reference Aging Standard	less than 1e-6 per year
OCXO SML B1 Aging	less than 1e-7 per year or less than 5e-10 per day

Notes

Specs from R&S SML data sheet Version 06.00. SML03 is analog only; SMV03 adds the I/Q modulator on the same RF platform. Confirm SML B1/B3/B5/B19 and high power SML B10 if present (B10 raises level to plus 23 dBm class).

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

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 13, 2026

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