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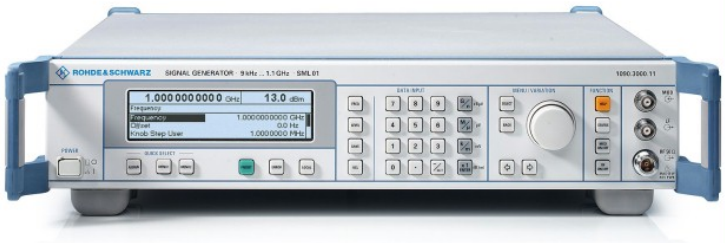
Data Sheet
August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz SML01 Signal Generator

The R&S SML01 is the 1.1 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 1090.3000.11 class. 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. Harmonics less than minus 30 dBc at or below +10 dBm (SML01 class). 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. Rohde & Schwarz SML01 Signal Generator 9 kHz to 1.1 GHz The R&S SML01 is the 1.1 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 1090.3000.11 class. 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. Harmonics less than minus 30 dBc at or below +10 dBm (SML01 class).



MODEL Rohde & Schwarz SML01	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU SML01	LISTING https://aumictechlabs.com/products/sml01-2/

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This unit

The Rohde & Schwarz SML01 is a compact signal generator delivering precision RF signal generation across 9 kHz to 1.1 GHz with output power spanning -140 dBm to +13 dBm. Built for

development, service, and production testing, it combines low phase noise, rapid frequency settling, and flexible modulation capabilities in a 19-inch rack-mountable 2 HU form factor.Technical Specifications Frequency Range: 9 kHz to 1.1 GHz Frequency Resolution: 0.1 Hz Output Power Range: -140 dBm to +13 dBm Output Level Resolution: 0.01 dB Level Accuracy: ±0.5 dB deviation at levels >-120 dBm SSB Phase Noise: <-128 dBc (1 Hz) at f = 1 GHz, Δf = 20 kHz Broadband Noise: typ. -128 dBc (1 Hz) at f = 1 GHz Residual FM: typ. 3 Hz rms at f = 1 GHz Residual AM: <0.02% rms (0.03 kHz to 20 kHz) Frequency Setting Time: <10 ms Internal LF Generator: 0.1 Hz to 1 MHz Spurious Suppression: Non-harmonics <-30 dBc; subharmonics 1.1 GHz) Electronic Attenuator: Interruption-free level setting Dimensions: 19" rack-mountable, 88 mm height (2 HU)Key Features Selectable frequency generation modes including Extended Divider Range operation AM, FM, and phase modulation (φM) standard Digital frequency and level sweep capability GPIB and RS-232 interfaces for remote control and automated test integration Electronic attenuator eliminates switching artifacts during level changesModulation & Options Optional pulse modulation with integrated pulse generator (SML-B3) Optional stereo coder with analog and digital audio inputs (SML-B5) Optional OCXO reference oscillator for enhanced frequency accuracy (SML-B1)Typical Applications Radio receiver alignment and characterization, RF filter and amplifier testing, communication system development, and automated production test environments requiring stable, low-noise stimulus signals.

SML01 Characteristics / Specifications

PARAMETER	VALUE
Model	SML01
Manufacturer	Rohde & Schwarz
Instrument Type	Analog RF Signal Generator
Alias	R&S SML01; 1090.3000.11
Frequency Range	9 kHz to 1.1 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 Resolution	0.1 dB
Level Accuracy 100 kHz to 1.1 GHz levels greater than minus 120 dBm	less than 0.5 dB
Frequency Response 100 kHz to 1.1 GHz at 0 dBm	less than 0.5 dB, typically 0.3 dB
Characteristic Impedance	50 ohm
VSWR SML	less than 1.5
Noninterrupting Level Range	20 dB, overrange 30 dB
Harmonicsfgreater than 100 kHz levels less than or equal to plus 10 dBm	less than minus 30 dBc
Subharmonicsfless than or equal to 1.1 GHz	none
Nonharmonicsfless than or equal to 1.1 GHz offset greater than 10 kHz	less than minus 70 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

PARAMETER	VALUE
Residual FM rms 0.3 to 3 kHzfequals 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 kHzmequals 30 percent	less than 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	50 W class (f less than or equal to 2.2 GHz family)
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
Sibling SML02 Range	9 kHz to 2.2 GHz
Sibling SML03 Range	9 kHz to 3.3 GHz Notes Specs from R&S SML data sheet Version 06.00. SML01 is analog only. Confirm SML B1/B3/B5/B19 and high power SML B10 if present.

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
Pulse On Off Ratio SML B3	greater than 90 dB
Pulse Rise Fall SML B3	less than 20 ns, typically 10 ns
Max Reverse RF	50 W class (f less than or equal to 2.2 GHz family)
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
Sibling SML02 Range	9 kHz to 2.2 GHz
Sibling SML03 Range	9 kHz to 3.3 GHz

Technical Specifications

PARAMETER	VALUE
Model	SML01
Manufacturer	Rohde & Schwarz
Instrument Type	Analog RF Signal Generator
Alias	R&S SML01; 1090.3000.11
Frequency Range	9 kHz to 1.1 GHz
Frequency Resolution	0.1 Hz

Specifications

PARAMETER	VALUE
Model	SML01
Manufacturer	Rohde & Schwarz

PARAMETER	VALUE
Instrument Type	Analog RF Signal Generator
Alias	R&S SML01; 1090.3000.11
Frequency Range	9 kHz to 1.1 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 Resolution	0.1 dB

Level Accuracy 100 kHz to 1.1 GHz levels greater than minus 120 dBm: less than 0.5 dB
Frequency Response 100 kHz to 1.1 GHz at 0 dBm: less than 0.5 dB, typically 0.3 dB

Specifications

PARAMETER	VALUE
Characteristic Impedance	50 ohm
VSWR SML01	less than 1.5
Noninterrupting Level Range	20 dB, overrange 30 dB

Harmonicsfgreater than 100 kHz levels less than or equal to plus 10 dBm: less than minus 30 dBc
Subharmonicsfless than or equal to 1.1 GHz: none
Nonharmonicsfless than or equal to 1.1 GHz offset greater than 10 kHz: less than minus 70 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
Pulse On Off Ratio SML B3	greater than 90 dB
Pulse Rise Fall SML B3	less than 20 ns, typically 10 ns
Max Reverse RF	50 W class (f less than or equal to 2.2 GHz family)
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

PARAMETER	VALUE
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
Sibling SML02 Range	9 kHz to 2.2 GHz
Sibling SML03 Range	9 kHz to 3.3 GHz

Notes
Specs from R&S SML data sheet Version 06.00. SML01 is analog only. Confirm SML B1/B3/B5/B19 and high power SML B10 if present.

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

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