

ROHDE & SCHWARZ

SMA100B

The Rohde & Schwarz SMA100B RF and microwave signal generator is designed for maximum performance without compromise. It delivers purest output signals while maintaining exceptionally high output power levels, making it ideal for demanding test and measurement tasks in the semiconductor, wireless communications, and aerospace and defense industries.

SPECIFICATIONS

Frequency

Minimum Frequency	8 kHz Hz
Maximum Frequency	67 GHz (frequency-option dependent) Hz
Frequency Resolution	0.001 Hz

Output

Maximum Output Power	up to +38 dBm (configuration dependent) dBm
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Modulation

Modulation	AM, FM, Phase, Pulse
Sweep Modes	Frequency, Level, LF (linear, logarithmic)

General

Reference Oscillator	Internal OCXO (high-stability options available)
Interfaces	USB, LAN, GPIB
Display	5" touchscreen (2 HU) or 7" touchscreen (3 HU)

Physical

Power Supply	100 V to 240 V AC, 50 Hz to 60 Hz / 400 Hz
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RF Characteristics

SSB Phase Noise (Option)	<-132 dBc/Hz (typ.) at 10 GHz with 10 kHz offset
Wideband Noise	<-162 dBc/Hz (meas.) at 10 GHz with 30 MHz offset
Level Resolution	0.01 dB
Output Impedance	50 Ω

Modulation Capabilities

AM Depth Range	0% to 100%
AM Resolution	0.1%
Pulse Modulation On/Off Ratio	> 80 dB

Front and Rear Panel Interfaces

RF Output Connector Type	N female (up to 6 GHz) or Test Port Adapter (3.5 mm / 2.92 mm / 1.85 mm option dependent)
LAN Interface Port	10/100/1000 Base-T (Gigabit Ethernet)

System, Software and Emulation

Display Resolution	800 x 480 pixels
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Power, Physical and Environmental

Calibration Interval	3 years (recommended)
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Ordering Options and Configurations

Pulse Generator Software Option	R&S@SMAB-K23
Pulse Train Software Option	R&S@SMAB-K27
Removable Mass Storage Option	R&S@SMAB-B85 (Removable Solid State Drive)

Inputs & Outputs

Reference Input Connector	BNC female
Reference Output Connector	BNC female

System Features

USB Power Sensor Support	Direct connection of R&S NRP power sensors
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Compliance

EMC Standards	EN 61326-1, EN 55011 Class A
Safety Standards	IEC/EN 61010-1

Interfaces

GPIO Interface Standard	IEEE-488.2
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Power

AC Input Voltage Range	100 V to 240 V AC (±10%)
AC Input Frequency	50 Hz to 60 Hz / 400 Hz (±10%)

TECHNOLOGY

RF and Microwave Signal Generation

APPLICATIONS

Test and measurement for RF semiconductor, wireless communications, and aerospace & defense industries

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