

ROHDE & SCHWARZ

SMF100A

The Rohde & Schwarz SMF100A is a first-rate, state-of-the-art microwave signal generator designed for the highest requirements in R&D, production, service, maintenance, and repair. It offers outstanding signal quality, exceptionally low phase noise, and high output power with an intuitive block-diagram operating interface.

SPECIFICATIONS

General

Interfaces	GPIB, LAN, USB, R&S® NRP power sensor connector
Display	SVGA color display, 800 x 600 pixels
Warm-up Time	30 minutes (for specifications)

Physical

Power Supply	100 V to 240 V AC, 50 Hz to 60 Hz; 100 V to 120 V AC, 400 Hz
Operating Temperature	0 to +55 °C

Frequency Characteristics

Frequency Range	100 kHz to 22 GHz / 31.8 GHz / 43.5 GHz (option dependent)
Frequency Resolution	0.001 Hz

Level Characteristics

Output Impedance	50 Ω
------------------	------

Spectral Purity

SSB Phase Noise (10 kHz offset)	typ. -120 dBc (at 10 GHz, 1 Hz measurement bandwidth)
---------------------------------	---

Capabilities & Options

Optional Features	Pulse generator, pulse modulator, pulse trains, removable compact flash disk, power analysis, high output power
-------------------	---

Level Performance

Level Resolution	0.01 dB
Minimum Output Power	Down to -130 dBm (with step attenuator option)

Modulation

Pulse Modulation On/Off Ratio	> 80 dB (with pulse modulator option)
Pulse Modulation Minimum Pulse Width	20 ns (with pulse modulator option)

Frequency

Internal Reference Frequency	10 MHz
------------------------------	--------

Inputs & Outputs

Reference Frequency Input / Output	10 MHz
RF Output Connector (≤ 22 GHz Models)	PC 3.5 mm male
RF Output Connector (31.8 GHz / 43.5 GHz Models)	2.4 mm male

Environmental

Storage Temperature	-40 °C to +71 °C
Operating Altitude	Up to 4600 m

Compliance

Safety Standards	IEC 61010-1, EN 61010-1, CAN/CSA-C22.2 No. 61010-1, UL 61010-1
------------------	--

Performance

Sweep Modes	Step, List, Ramp (optional)
-------------	-----------------------------

TECHNOLOGY

Microwave / RF

APPLICATIONS

R&D, Production, Service, Maintenance, Repair

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