



# R&S®SMB100B RF SIGNAL GENERATOR

Perfect combination of performance and usability in a compact size

The perfect choice for



Local oscillator substitution for design and test engineers

Receiver sensitivity testing for design and test engineers

FM receiver testing

Pulsed signals in aerospace and defense applications to test radar systems

Key specifications	
Frequency range	8 kHz to 1/3/6 GHz
Max Output power	34 dBm (meas.) at 1 GHz
SSB phase noise	< -132 dBc (typ.) at 1 GHz and an offset of 20 kHz
Non-harmonics	< -76 dBc (spec.) at 1 GHz
Modulation	AM/FM/φM/PM

**Perfect for signal quality, perfect for output power, perfect for use**

The new R&S®SMB100B RF signal generator is all about performance and versatility in a small footprint. Outstanding spectral purity and very high output power combined with comprehensive functionality and very simple operation are some of the impressive features of the R&S®SMB100B.

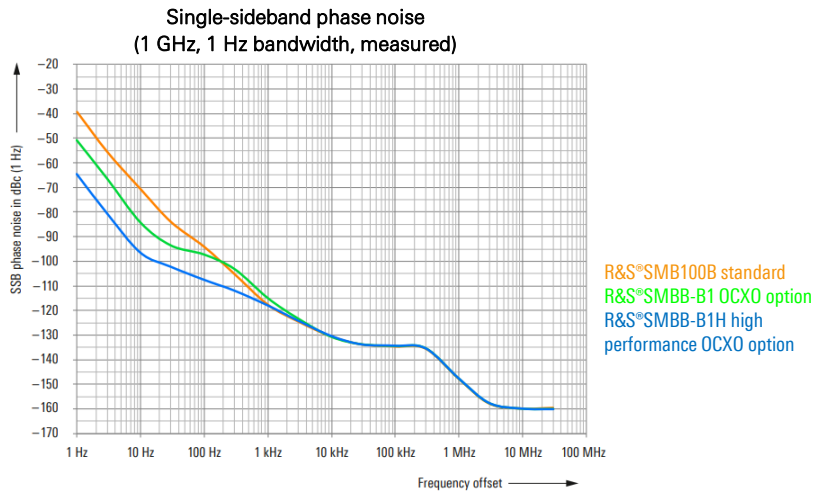
Your benefit	Features
No need for external amplifiers	▶ Ultra high output power (34 dBm, 1 GHz, meas.)
Freely configurable pulse scenarios	▶ Pulse train option in combination with the pulse modulator and pulse generator option
Quickly and correctly create remote control programs	▶ The instrument's built-in SCPI macro recorder with code generator can automatically record all manual settings and create an executable MATLAB® script.
Compensation of external frequency responses	▶ The R&S®SMB100B provides a user correction (UCOR) function for this purpose.
Replace your legacy signal generator	▶ R&S®LegacyPro enables the R&S®SMB100B to reliably emulate a wide range of legacy generators from vendors such as Keysight, Agilent, HP, Anritsu and Rohde & Schwarz.



For more information:

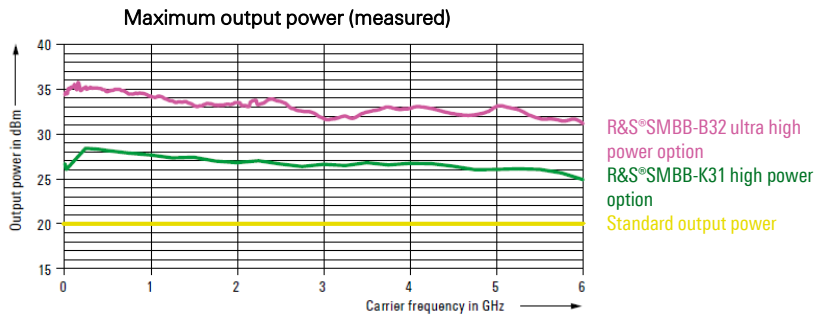
[www.rohde-schwarz.com/catalog/SMB100B](http://www.rohde-schwarz.com/catalog/SMB100B)

## Perfect for signal quality



Thanks to its innovative synthesizer design, the R&S®SMB100B has very low SSB phase and wideband noise and excellent suppression of nonharmonic signal components

## Perfect for output power



The R&S®SMB100B provides very high output power, no external amplifier is required downstream. This simplifies the test setup and results in high absolute level accuracy.

## Popular options

Frequency options	Item
8 kHz to 1 GHz	R&S®SMBB-B101
8 kHz to 3 GHz	R&S®SMBB-B103
8 kHz to 6 GHz	R&S®SMBB-B106
Reference oscillator options	
OCXO Reference Oscillator <sup>1)</sup>	R&S®SMBB-B1
OCXO Reference Oscillator, High Performance <sup>2)</sup>	R&S®SMBB-B1H
100 MHz, 1 GHz Ultra Low Noise Reference Input and Output	R&S®SMBB-B3
Flexible Reference Input from 1 MHz to 100 MHz	R&S®SMBB-K704
Output power options	
High Output Power 1/3/6 GHz	R&S®SMBB-K31
Ultra High Output Power 1/3/6 GHz <sup>3)</sup>	R&S®SMBB-B32
Power analysis	R&S®RTE-K31

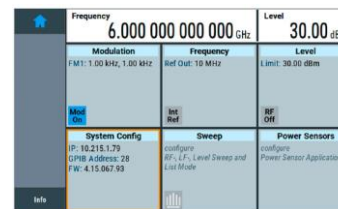
<sup>1)</sup> Only one of the R&S®SMBB-B1 or R&S®SMBB-B1H options can be installed.

<sup>2)</sup> Only one of the R&S®SMBB-B1 or R&S®SMBB-B1H options can be installed.

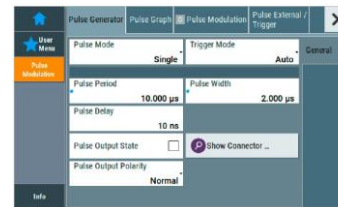
<sup>3)</sup> Requires the R&S®SMBB-K31 option.

## Perfect for use

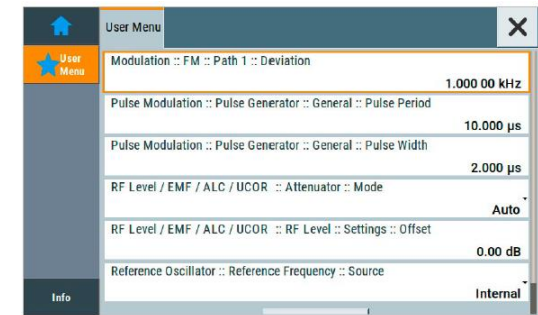
The R&S®SMB100B has a user-friendly high-resolution touchscreen interface which is fast and simple to operate.



Main screen - All important parameters and information.



Individual menu items can be added to the user menu. Added items are marked with a blue star.



User menu - Individually composed parameters can be directly set in this menu.