

R&S® SMA100B Signal Generator

Performance leadership without compromise



Purest of all signals

Generating high-quality RF & microwave signals has always involved trade-offs. You could never push the performance boundaries in all directions at the same time. Until now. The new R&S®SMA100B high-performance analog signal generator from Rohde & Schwarz solves this problem. Cleanest signals, highest power levels, lowest harmonics, all at the same time from the same generator. Performance leadership without compromise.

The perfect choice for

Low phase noise

High output power

Pulse & analog modulation

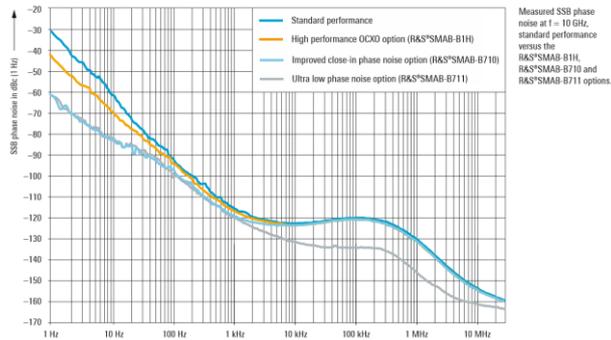
Legacy equipment replacement

Output frequency

SMAB-B103	8 kHz to 3 GHz
SMAB-B106	8 kHz to 6 GHz
SMAB-B112	8 kHz to 12.75 GHz
SMAB-B120	8 kHz to 20 GHz

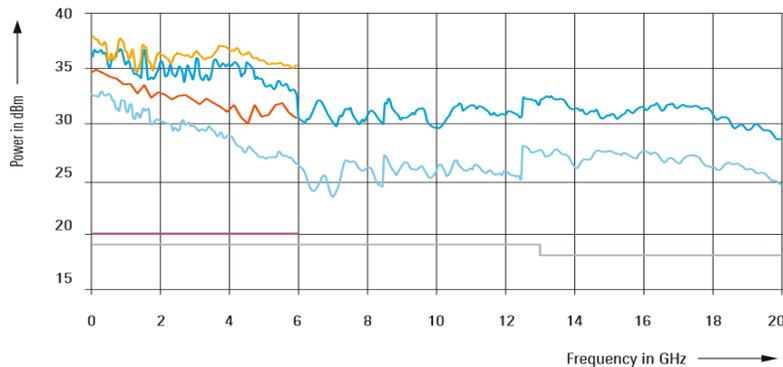
► For more information, visit
www.rohde-schwarz.com/product/sma100b

Ultra low phase noise



The quality of the test signal always impacts the quality of your results. With industry-leading phase noise performance in all areas (close-in, pedestal and wideband noise), the R&S®SMA100B delivers the purest signals, ensuring you to test the DUT, and not the signal generator.

Ultra high output power AND lowest harmonics



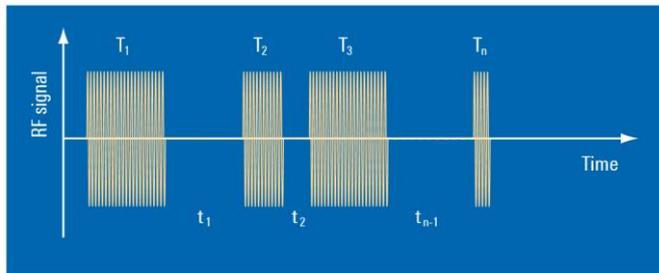
Measured maximum available output power in the frequency ranges from 8 kHz to 6 GHz and 8 kHz to 20 GHz – for the base unit, with the high power option, and with the ultra high power option.

- R&S®SMAB-B32 ultra high power option
- R&S®SMAB-K31 high power option
- Standard output power up to 6 GHz
- R&S®SMAB-B34 ultra high power option
- R&S®SMAB-K33 high power option
- Standard output power up to 20 GHz

With the highest output power available from any signal generator, the R&S®SMA100B eliminates the need for external amplifiers, reducing the complexity of the test setup by removing these expensive uncalibrated components.

Traditionally, high power signals also have significant harmonic components, usually only around 35 dB below the carrier. The R&S®SMA100B changes this. Trade-offs are unnecessary. You get the highest power AND the lowest harmonics (< -70 dBc (meas.), X-band, +18 dBm), ensuring that you test with the purest signals.

Accurate narrow pulsed CW signals



Amplitude flatness, accuracy and high on/off ratios are critical when producing pulsed CW signals. The R&S®SMA100B can achieve an on/off ratio of around 100 dB, while utilizing closed-loop level control to produce exceptionally flat and accurate pulses as narrow as 100 ns. To supplement this critical RF performance, an internal pulse generator and pulse train option make it possible to create more complex test cases without having to add external equipment with elaborate triggering setups.

Key product information

SMAB-B710(N)	Improved close-in phase noise
SMAB-B711(N)	Ultra phase noise
SMAB-K31	High output power 3/6 GHz
SMAB-B32	Ultra high output power 3/6 GHz
SMAB-K33	High output power 12.75/20 GHz
SMAB-B34	Ultra high output power 12.75/20 GHz
SMAB-K720	AM/FM/φM
SMAB-K22	High performance pulse modulator
SMAB-K23	Pulse generator
SMAB-K27	Pulse train



Replacing old generators

The challenge of maintaining old, unsupported equipment is problematic. Replacing old equipment does not have to be. The R&S®SMA100B simplifies the process by offering code emulation of a wide range of signal generators from many different vendors. LegacyPro code emulation enables the R&S®SMA100B to be integrated into legacy ATE systems with minimal effort, resulting in improved uptime, lower cost of ownership and a longer serviceable life for the test rack.

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