

ROHDE & SCHWARZ

SMIQ03B

The Rohde & Schwarz SMIQ03B is a precision vector signal generator operating from 300 kHz to 3.3 GHz. Part of the SMIQ family, it features a built-in standard I/Q modulator, extremely fast frequency hopping, and comprehensive analog and digital modulation capabilities. It is expressly designed to meet the rigorous demands of development, type-approval testing, and production for digital mobile radio and advanced communication systems.

SPECIFICATIONS

Frequency

Minimum Frequency	300 kHz Hz
Maximum Frequency	3.3 GHz Hz
Frequency Resolution	0.1 Hz

Output

Output Power Range	-144 dBm to +13 dBm (typical overrange to +16 dBm)
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General

Reference Oscillator	Standard aging < 1 × 10 ⁻⁶ /year; OCXO (Option B1) < 1 × 10 ⁻⁹ /day
Interfaces	IEEE-488.2 (GPIB), RS-232
Display	High-contrast LCD

Physical

Power Supply	100 V to 120 V / 220 V to 240 V AC, 50 Hz to 400 Hz
Dimensions (W×H×D)	435 x 192 x 460 mm mm

Level/Amplitude Characteristics

Output Impedance	50 Ω
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I/Q Modulation (Vector)

I/Q Modulator	Standard
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Connectivity & Interfaces

RF Output Connector	N (female)
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RF Output

Max. Reverse Power	50 W
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Analog Modulation

AM Depth Range	0 to 100%
Pulse Modulation On/Off Ratio	> 80 dB
Pulse Modulation Rise/Fall Time	< 20 ns (typ. 10 ns)

Vector Modulation

I/Q Baseband Input Bandwidth	DC to 30 MHz
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Compliance

Safety Compliance	EN 61010-1
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Reference Frequency

External Reference Input Frequencies	1 MHz, 2 MHz, 5 MHz, 10 MHz
Internal Reference Output Frequency	10 MHz

Internal Modulation Generator

Internal LF Generator Frequency Range	0.1 Hz to 500 kHz
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TECHNOLOGY

Vector Signal Generator

APPLICATIONS

Development, type-approval testing, and production of analog and digital communication equipment

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