


Aumictech

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz SMIQ03E 0.3 to 3.3GHz Signal Generator

Rohde & Schwarz SMIQ03E Vector Signal Generator 300 kHz to 3.3 GHz The R&S SMIQ03E is the economy 3.3 GHz vector signal generator in the original SMIQ family (order 1106.1506.03). Range is 300 kHz to 3.3 GHz with 0.1 Hz resolution. SMIQ02/03 target development and type-approval; SMIQ02E/03E are production-oriented economy models with FM/φM modulator SM-B5 as standard. Analog and digital modulation, GMSK and $\pi/4$ DQPSK class baseband, and the SMIQ option set support cellular production test. Harmonics are less than minus 30 dBc at levels at or below 10 dBm. The R&S SMIQ03E is the economy 3.3 GHz vector signal generator in the original SMIQ family (order 1106.1506.03). Range is 300 kHz to 3.3 GHz with 0.1 Hz resolution. SMIQ02/03 target development and type-approval; SMIQ02E/03E are production-oriented economy models with FM/φM modulator SM-B5 as standard. Analog and digital modulation, GMSK and $\pi/4$ DQPSK class baseband, and the SMIQ option set support cellular production test. Harmonics are less than minus 30 dBc at levels at or below 10 dBm.



MODEL

Rohde & Schwarz SMIQ03E

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

SMIQ03E

LISTING

<https://aumictechlabs.com/products/smiq03e-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Rohde & Schwarz SMIQ03E is a production-grade signal generator delivering analog and digital modulation across 0.3 GHz to 3.3 GHz. This economical instrument generates TDMA and CDMA signals for major mobile radio standards with vector-accurate I/Q modulation up to 7 Msymbol/s, making it ideal for wireless communications development and manufacturing test environments requiring reliable, repeatable performance.

Technical Specifications

Frequency Range: 0.3 GHz to 3.3 GHz **Output Power:** Up to +16 dBm with output level accuracy better than 0.5 dB **Modulation Capabilities:** GFSK, GMSK, and $\pi/4$ DQPSK with broadband I/Q modulator. Extended modulation modes and support for digital mobile standards (PHS, NADC, PDC, GSM, IS-95 CDMA) available via options SMIQB10, SMIQB11, and SMIQB42. **Symbol Rate:** Up to 7 Msymbol/s **digitally modulated signal generation** **Spectral Purity:** Typically -130 dBc (1 Hz) at 1 GHz, 20 kHz carrier offset **Switching Speed:** Frequency setting <3 ms, level setting <2.5 ms (without mechanical attenuator switching); frequency hopping 500 μ s **Data Memory:** 4 Mbit internal generator (with SMIQB11 option) **Fading Simulation:** Available with SMIQB14 option **Power Supply:** 90–132 V / 180–265 V (auto-ranging), 47–440 Hz, max 300 VA **Physical:** 435 mm W $\times$ 192 mm H $\times$ 460 mm D; 25 kg fully equipped

Key Features

- Low phase noise optimized for production workflows
- Fast frequency and level settling enables efficient test sequences
- High output level with tight accuracy supports demanding applications
- Modular option structure allows cost-effective scaling to specific standards
- Three-year calibration cycle

Typical Applications

Wireless communications development, mobile radio standard validation, production testing of TDMA/CDMA devices, and signal simulation for transceiver characterization.

Compatibility & Integration

Remote control via IEC 625 (IEEE 488) interface with SCPI 1993.0 command set enables integration into automated test systems.

Features & description

From manufacturer datasheet

Features

• Economy sibling of SMIQ03 (development) at the same 3.3 GHz RF ceiling • SM-B5 FM/φM included onEmodels (optional on SMIQ02/03) • Optional SM-B1 OCXO • Optional data generator, fading, noise, BERT, digital standards • IEC/IEEE remote for production racks

Applications

• Production ATE of 2G/3G receivers to 3.3 GHz • Vector-modulated component test • Analog AM/FM/φM stimulus • Digital-standard options (IS-95, W-CDMA, and others as fitted) • List-mode and swept production hops

SMIQ03E Characteristics / Specifications

PARAMETER	VALUE
Model	SMIQ03E
Manufacturer	Rohde & Schwarz
Instrument Type	Vector signal generator (economy)
Alias	SMIQ 03E; R&S SMIQ03E
Order Number	1106.1506.03
Frequency Range	300 kHz to 3.3 GHz
Frequency Resolution	0.1 Hz
Reference Aging Standard	1e-6 per year (after 30 days)
OCXO SM B1 Aging	less than 1e-9 per day
Reference Temperature Effect Standard	2e-6 (0 C to 50 C)
Harmonics at 10 dBm	less than minus 30 dBc
FM PhiM Modulator	SM-B5 standard onEmodels
Intended Role	production economy vector generator
Sibling SMIQ03 Range	300 kHz to 3.3 GHz (development)
Sibling SMIQ02E Range	300 kHz to 2.2 GHz
Sibling SMIQ03A Range	300 kHz to 3.3 GHz (1084.8004.53)
Output Impedance	50 ohm
Modulation Analog	AM, FM, phiM, pulse (as fitted)
Modulation Digital	GMSK, PSK, QAM class per options
Baseband Filters	root-cos, cos, Gauss, Bessel class
Data Generator Option	SMIQB11 class
Digital Standards	option-dependent (B42/B43 and later)
Remote Interface	IEC IEEE bus
Form Factor	SMIQ family benchtop
Calibration Cycle Class	three-year SMIQ family

PARAMETER	VALUE
RF Start	300 kHz
RF Stop	3.3 GHz
Level Class	SMIQ family high output with electronic attenuator
Low ACP Option	SMIQB47
BERT Option	SMIQB21
Noise Option	SMIQB17

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	SMIQ03E
Manufacturer	Rohde & Schwarz
Instrument Type	Vector signal generator (economy)
Alias	SMIQ 03E; R&S SMIQ03E
Order Number	1106.1506.03
Frequency Range	300 kHz to 3.3 GHz
Frequency Resolution	0.1 Hz
Reference Aging Standard	1e-6 per year (after 30 days)
OCXO SM B1 Aging	less than 1e-9 per day
Reference Temperature Effect Standard	2e-6 (0 C to 50 C)
Harmonics at 10 dBm	less than minus 30 dBc
FM PhiM Modulator	SM-B5 standard onEmodels
Intended Role	production economy vector generator
Sibling SMIQ03 Range	300 kHz to 3.3 GHz (development)
Sibling SMIQ02E Range	300 kHz to 2.2 GHz
Sibling SMIQ03A Range	300 kHz to 3.3 GHz (1084.8004.53)
Output Impedance	50 ohm
Modulation Analog	AM, FM, phiM, pulse (as fitted)
Modulation Digital	GMSK, PSK, QAM class per options
Baseband Filters	root-cos, cos, Gauss, Bessel class
Option SM B1: OCXO 1036.7599.02	
Option SM B5: FM/phiM 1036.8489.02 (standard on E)	
Specifications	
PARAMETER	VALUE
Data Generator Option	SMIQB11 class
Digital Standards	option-dependent (B42/B43 and later)

PARAMETER	VALUE
Remote Interface	IEC IEEE bus
Form Factor	SMIQ family benchtop
Calibration Cycle Class	three-year SMIQ family
RF Start	300 kHz
RF Stop	3.3 GHz
Level Class	SMIQ family high output with electronic attenuator
Low ACP Option	SMIQB47
BERT Option	SMIQB21
Noise Option	SMIQB17

Notes
Specs from the R&S SMIQ02/02E/03/03E vector signal generator data sheet. E models are production economy units; confirm SM-B1 and digital-standard options. Do not confuse with SMIQ03B (laterBfamily).

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.