

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz SME02 5kHz to 1.5GHz Signal Generator

Rohde & Schwarz SME02 Signal Generator 5 kHz to 1.5 GHz The R&S SME02 is the 1.5 GHz member of the SME digital/analog signal generator family (order 1038.6002.02 class). SME02/03/06 are electrically identical except for frequency ceiling: 5 kHz to 1.5 / 3 / 6 GHz. SME generates the complex signals used in digital mobile radio (modulation type, data format, TDMA structure, hop patterns) and remains a full analog AM/FM/pulse generator. List mode stores up to 4096 frequency/level pairs with setting less than 0.5 ms. Ultra-low RF leakage supports pager testing. Pulse modulator option on SME02 is SM-B3. The R&S SME02 is the 1.5 GHz member of the SME digital/analog signal generator family (order 1038.6002.02 class). SME02/03/06 are electrically identical except for frequency ceiling: 5 kHz to 1.5 / 3 / 6 GHz. SME generates the complex signals used in digital mobile radio (modulation type, data format, TDMA structure, hop patterns) and remains a full analog AM/FM/pulse generator. List mode stores up to 4096 frequency/level pairs with setting less than 0.5 ms. Ultra-low RF leakage supports pager testing. Pulse modulator option on SME02 is SM-B3.



MODEL	CALIBRATION
Rohde & Schwarz SME02	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
SME02	https://aumictechlabs.com/products/sme02-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Rohde & Schwarz SME02 is a synthesized signal generator spanning 5 kHz to 1.5 GHz, engineered for development and testing of digital mobile radio receivers and RF systems. It generates signals compliant with major digital radio standards while supporting both digital and analog modulation in a single instrument. The SME02 delivers output power from -144 dBm to +13 dBm with spectral purity better than -30 dBc, making it suitable for sensitive receiver characterization and component validation.

Technical Specifications

Frequency Range: 5 kHz to 1.5 GHz
Output Power: -144 dBm to +13 dBm
Spectral Purity: Better than -30 dBc
RF Leakage: Ultra-low, suitable for measurements on highly sensitive pagers
Modulation Modes: FSK, 4FSK, FFSK, GFSK, GMSK, QPSK, 4-DQPSK (digital); AM, FM, phase modulation (analog, simultaneous capability)
Sweep Functions: RF sweep, LF sweep, level sweep
Data Handling: Internal data generator with programmable sequences; List Mode supports up to 4096 frequency and level combinations with setting time <0.5 ms
Power Requirements: 90–132 V or 180–265 VAC, 47–440 Hz, with automatic voltage selection and short-circuit protection

Key Features

All common digital modulation modes within a single unit
No external modulation or data sources required
User-programmable TDMA structures and data sequences
IEC/IEEE (GPIB) interface for remote control

Optional Modules

SM-B1: OCXO Reference Oscillator (aging 80 dB, rise/fall time <10 ns)
SM-B4: Pulse Generator
SM-B6: Multifunction Generator
SM-B11: DM-Coder (Data coder)

Typical Applications

Digital mobile radio receiver development and testing, RF system and component characterization, pager sensitivity measurements, modulation standard compliance verification, and maintenance operations across multiple frequency bands.

Features & description

From manufacturer datasheet

Features

- User-programmable data sequences and TDMA structure
- RF, LF, and level sweep
- Optional pulse modulator SM-B3 (on/off greater than 80 dB, rise/fall less than 10 ns class)
- Economy sibling SME03E (5 kHz to 2.2 GHz) omits some list-mode speed
- Large option set for digital standards

Applications

- Digital mobile-radio receiver development and production
- Analog receiver and EMS measurements
- Frequency-hopping and list-mode ATE
- TDMA / user data-sequence generation
- High-sensitivity pager and leakage-critical benches

SME02 Characteristics / Specifications

PARAMETER	VALUE
Model	SME02
Manufacturer	Rohde & Schwarz
Instrument Type	Digital / analog signal generator
Alias	SME 02; R&S SME02
Order Number Class	1038.6002.02
Frequency Range	5 kHz to 1.5 GHz
Sibling SME03 Range	5 kHz to 3 GHz
Sibling SME06 Range	5 kHz to 6 GHz
Sibling SME03E Range	5 kHz to 2.2 GHz
List Mode Pairs	up to 4096 (not SME03E)
List Mode Setting Time	less than 0.5 ms
Pulse On Off Ratio	greater than 80 dB (SM-B3)
Pulse Rise Fall	less than 10 ns (SM-B3 class)
Pulse Modulator Option SME	SM-B3
Modulation Analog	AM, FM, pulse
Modulation Digital	mobile-radio standards per installed options
Sweep Types	RF, LF, level
RF Leakage	ultra-low, pager-class shielding
Remote Interface	IEC IEEE bus
Form Factor	benchtop SME family chassis
Intended Standards	GSM and other digital cellular / PMR (option dependent)
Data Sequences	user programmable
TDMA Structure	user programmable
Hop Patterns	supported
Analog World	full conventional signal-generator functions

PARAMETER	VALUE
Economy Sibling	SME03E, reduced list-mode capability
Family Identity	SME02/03/06 identical except frequency range
Lower Frequency	5 kHz
Upper Frequency	1.5 GHz Notes Specs from the R&S SME Signal Generator data sheet. Digital-standard capability is entirely option-dependent. Confirm SM-B3 pulse modulator and installed digital-standard options on the SME02 configuration label.

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	SME02
Manufacturer	Rohde & Schwarz
Instrument Type	Digital / analog signal generator
Alias	SME 02; R&S SME02
Order Number Class	1038.6002.02
Frequency Range	5 kHz to 1.5 GHz
Sibling SME03 Range	5 kHz to 3 GHz
Sibling SME06 Range	5 kHz to 6 GHz
Sibling SME03E Range	5 kHz to 2.2 GHz
List Mode Pairs	up to 4096 (not SME03E)
List Mode Setting Time	less than 0.5 ms
Pulse On Off Ratio	greater than 80 dB (SM-B3)
Pulse Rise Fall	less than 10 ns (SM-B3 class)
Pulse Modulator Option SME02	SM-B3
Pulse Modulator Option SME03	SM-B8
Pulse Modulator Option SME06	SM-B9
Modulation Analog	AM, FM, pulse
Modulation Digital	mobile-radio standards per installed options
Sweep Types	RF, LF, level
RF Leakage	ultra-low, pager-class shielding
Remote Interface	IEC IEEE bus
Form Factor	benchtop SME family chassis
Intended Standards	GSM and other digital cellular / PMR (option dependent)
Data Sequences	user programmable
TDMA Structure	user programmable
Hop Patterns	supported

PARAMETER	VALUE
Analog World	full conventional signal-generator functions

Option Concept: field-configurable digital and analog options

Specifications

PARAMETER	VALUE
Economy Sibling	SME03E, reduced list-mode capability
Family Identity	SME02/03/06 identical except frequency range
Lower Frequency	5 kHz
Upper Frequency	1.5 GHz

Notes
Specs from the R&S SME Signal Generator data sheet. Digital-standard capability is entirely option-dependent. Confirm SM-B3 pulse modulator and installed digital-standard options on the SME02 configuration label.

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.