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Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz SMATE200A Vector Signal Generator

The R&S SMATE200A (order 1400.7005.02 class) is the production / ATE sibling of SMU200A. Frequency is 100 kHz to 3 GHz or 6 GHz per installed SMATE-B103/B106 (path A) and optional B203/B206 (path B). Display and front keypad are omitted; RF and baseband connectors are on the rear. Setting time is less than 2 ms (less than 400 us in list mode). Level is minus 144 dBm to +13 dBm PEP (overrange +16 dBm); high-power B31/B36 raises that to +19 dBm PEP (overrange typically +26 dBm). Up to two independent baseband generators (B9/B10/B11) plus fading, AWGN, and digital-standard options share the SMU option set. High throughput production ATE of 2G/3G/4G receivers Path B 6 GHz Option: SMATE-B206 1401.1600.02 Form Factor: 4 HU, rear connectors, no front display Remote Interfaces: IEEE 488.2, LAN Gigabit Ethernet, USB Specs from R&S SMATE200A brochure and specifications. Confirm installed B103/B106 vs B203/B206, B31/B36 high power, and baseband memory option. This is the ATE SMATE, not the front-panel SMU200A.



MODEL

**Rohde & Schwarz
SMATE200A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

SMATE200A

LISTING

<https://aumictechlabs.com/products/smate200a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Rohde & Schwarz SMATE200A is a vector signal generator engineered for production test environments, delivering RF signal generation across 100 kHz to 6 GHz with configurable single or dual-path outputs. Built on the proven SMU200A platform, it combines exceptional spectral purity, rapid frequency and level settling, and flexible baseband capabilities to minimize test cycle times in automated test setups. The rear-panel connector layout and rack-mountable design integrate into ATE systems requiring both speed and measurement repeatability.

Technical Specifications

Frequency and Power Frequency Range: 100 kHz to 6 GHz (configurable 3 GHz or 6 GHz RF output per path) Frequency Resolution: 10.0 mHz Output Power: Up to +26 dBm (High-Power Output option) Output Power Repeatability: Typically 0.05 dB Signal Quality System Bandwidth: Up to 200 MHz RF bandwidth via I/Q modulator Spectral Purity (1 GHz): Nonharmonics 10 kHz 850 kHz -135 dBc typ. SSB Phase Noise (20 kHz offset): -135 dBc typ. (-140 dBc typ. with Low Phase Noise option) Wideband Noise (>5 MHz offset): -153 dBc typ. (CW); -149 dBc typ. (I/Q modulation) ACLR Performance: Typically 70 dB (3GPP FDD) Settling and Modulation Speed Frequency/Level Setting Time: Typically <3 ms List Mode Setting Time: <400 μ s Multisegment Waveform Switching: Approximately 5 μ s Baseband and Arbitrary Waveform Independent Baseband Generators: Up to two Memory Depth: 16 Msamples, 64 Msamples, or 128 Msamples options Modulation Modes: AM, FM, Pulse, Phase, FSK, Vector, Wideband AM, ASK Internal Baseband Generation: Up to 80 MHz RF bandwidth; real-time digital modulation supported

Key Features

Fast Hop Mode with flexibly addressable frequency/level pairs Flat frequency response across RF bandwidth for controlled EVM Dual-channel capability with independent signal path control Low phase noise option for demanding phase coherence requirements

Typical Applications

Wireless transceiver and receiver testing Production validation of communication standards (3GPP, LTE, 5G NR protocols) Electronic component characterization High-throughput ATE environments

Compatibility & Integration

Rack-mountable form factor with rear-panel connectors optimized for production automation. Supports preloaded waveform playback from internal arbitrary waveform memory.

Features & description

From manufacturer datasheet

High Power Path B: SMATE-B36

Form Factor: 4 HU, rear connectors, no front display Remote Interfaces: IEEE 488.2, LAN Gigabit Ethernet, USB Notes Specs from R&S SMATE200A brochure and specifications. Confirm installed B103/B106 vs B203/B206, B31/B36 high power, and baseband memory option. This is the ATE SMATE, not the front-panel SMU200A.

SMATE200A Characteristics / Specifications

PARAMETER	VALUE
Model	SMATE200A
Manufacturer	Rohde & Schwarz
Instrument Type	Dual path vector signal generator (ATE)
Alias	SMATE 200A; R&S SMATE200A
Frequency Range	100 kHz to 3 GHz or 6 GHz (option)
Frequency Underrange	100 kHz to less than 300 kHz
Frequency Resolution	0.01 Hz
Setting Time	less than 2 ms
List Mode Setting Time	less than 400 us
Level Range Standard	minus 144 dBm to +13 dBm PEP (f at or below 3 GHz)
Level Overrange Standard	+16 dBm
Level with High Power Option	minus 144 dBm to +19 dBm PEP (f at or below 3 GHz)
Level Overrange High Power	typically +26 dBm
Level above 3 GHz Standard	+11 dBm PEP
Level above 3 GHz High Power	+17 dBm PEP
Level Resolution	0.01 dB
Level Error 1 MHz to 3 GHz	less than 0.5 dB (above minus 120 dBm, auto att, +18 C to +33 C)
SSB Phase Noise 20 kHz Offset	typically minus 135 dBc; typically minus 140 dBc with B22
Wideband Noise CW	typically minus 153 dBc (1 Hz) at plus/minus 5 MHz
ACLR 3GPP TM1 64 DPCH	typically 70 dB
I/Q Bandwidth Internal	80 MHz
I/Q Bandwidth External	200 MHz
ARB Memory	16 Msample (B11), 64 Msample (B10), 128 Msample (B9)
Reference Aging Standard	less than 1e-9 per day, less than 1e-7 per year after 30 days
Reference Aging B	less than 5e-10 per day, less than 3e-8 per year

PARAMETER	VALUE
Path A 3 GHz Option	SMATE-B103 1401.1000.02
Path A 6 GHz Option	SMATE-B106 1401.1200.02
Path B 3 GHz Option	SMATE-B203 1401.1400.02
Path B 6 GHz Option	SMATE-B206 1401.1600.02
High Power Path A	SMATE-B31
High Power Path B	SMATE-B36
Form Factor	4 HU, rear connectors, no front display
Remote Interfaces	IEEE 488.2, LAN Gigabit Ethernet, USB Notes Specs from R&S SMATE200A brochure and specifications. Confirm installed B103/B106 vs B203/B206, B31/B36 high power, and baseband memory option. This is the ATE SMATE, not the front-panel SMU200A.
Bandwidth	internal 80 MHz; external 200 MHz

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	
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SSB Phase Noise 20 kHz Offset	typically minus 135 dBc; typically minus 140 dBc with B22

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Wideband Noise CW	typically minus 153 dBc (1 Hz) at plus/minus 5 MHz
ACLR 3GPP TM1 64 DPCH	typically 70 dB
I/Q Bandwidth Internal	80 MHz

Specifications

PARAMETER	VALUE
I/Q Bandwidth External	200 MHz
ARB Memory	16 Msample (B11), 64 Msample (B10), 128 Msample (B9)
Reference Aging Standard	less than 1e-9 per day, less than 1e-7 per year after 30 days

Specifications

PARAMETER	VALUE
Reference Aging B22	less than 5e-10 per day, less than 3e-8 per year
Path A 3 GHz Option	SMATE-B103 1401.1000.02
Path A 6 GHz Option	SMATE-B106 1401.1200.02

Specifications

PARAMETER	VALUE
Path B 3 GHz Option	SMATE-B203 1401.1400.02
Path B 6 GHz Option	SMATE-B206 1401.1600.02
High Power Path A	SMATE-B31

Specifications

PARAMETER	VALUE
High Power Path B	SMATE-B36
Form Factor	4 HU, rear connectors, no front display
Remote Interfaces	IEEE 488.2, LAN Gigabit Ethernet, USB

Notes

Specs from R&S SMATE200A brochure and specifications. Confirm installed B103/B106 vs B203/B206, B31/B36 high power, and baseband memory option. This is the ATE SMATE, not the front-panel SMU200A.

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

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.