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Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde and Schwarz FSWP26 Phase Noise Analyzer & VCO Tester, 26.5 GHz

Rohde & Schwarz FSWP26 Phase Noise Analyzer and VCO Tester The R&S FSWP26 is the 26.5 GHz member of the FSWP phase-noise analyzer and VCO tester family (order 1322.8003.26). Phase-noise / AM-noise coverage is 1 MHz to 26.5 GHz DC-coupled, or 10 MHz to 26.5 GHz AC-coupled. Cross-correlation and low-noise internal sources yield typical sensitivity of about minus 172 dBc (1 Hz) at 1 GHz and minus 158 dBc (1 Hz) at 10 GHz, both at 10 kHz offset. Optional FSWP-B1 adds a high-end signal/spectrum analyzer from 10 Hz to 26.5 GHz. The R&S FSWP26 is the 26.5 GHz member of the FSWP phase-noise analyzer and VCO tester family (order 1322.8003.26). Phase-noise / AM-noise coverage is 1 MHz to 26.5 GHz DC-coupled, or 10 MHz to 26.5 GHz AC-coupled. Cross-correlation and low-noise internal sources yield typical sensitivity of about minus 172 dBc (1 Hz) at 1 GHz and minus 158 dBc (1 Hz) at 10 GHz, both at 10 kHz offset. Optional FSWP-B1 adds a high-end signal/spectrum analyzer from 10 Hz to 26.5 GHz.



MODEL

Rohde & Schwarz FSWP26

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

FSWP26

LISTING

<https://aumictechlabs.com/products/fswp26-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Rohde & Schwarz FSWP26 is a phase noise analyzer and VCO tester that combines low-noise internal sources with cross-correlation technology for high-sensitivity phase noise measurements

across 1 MHz to 26.5 GHz. The instrument delivers DANL of -156 dBm (1 Hz) standard, reducible to near -174 dBm (1 Hz) with noise cancellation, and achieves phase noise performance of -172 dBc (1 Hz) at 1 GHz with 10 kHz offset. Built for wireless communications, aerospace and defense, and component characterization, it integrates signal and spectrum analysis with a 12.1" touchscreen display for simultaneous multi-window viewing.

Technical Specifications

Frequency Range: 1 MHz to 26.5 GHz Analysis Bandwidth: 80 MHz standard; 320 MHz with optional upgrade DANL: -156 dBm (1 Hz) without noise cancellation; near -174 dBm (1 Hz) with noise cancellation Third-Order Intercept (TOI): Typically 25 dBm Phase Noise (Internal Source): -172 dBc (1 Hz) at 1 GHz, 10 kHz offset; -153 dBc (1 Hz) at 10 GHz, 10 kHz offset; less than -166 dBc (1 Hz) at 1 GHz, 10 kHz offset Measurement Uncertainty: <0.2 dB to 3.6 GHz; <0.3 dB to 8 GHz Display: 12.1" touchscreen

Key Features

- Low-noise internal DC sources for VCO characterization
- Cross-correlation for simultaneous amplitude and phase noise measurement
- Phase noise measurement on pulsed and CW signals
- Additive phase noise measurement capability
- Automatic VCO characterization including harmonics relative to tuning voltage
- Transient analysis of frequency hops up to 8 GHz wide
- Triggering on frequency or phase deviation via real-time demodulation
- Allan variance calculation from phase noise data
- Integrated signal and spectrum analysis

Typical Applications

- Radar source characterization and phase noise analysis
- VCO tuning and performance validation
- Pulsed signal residual phase noise measurement
- Wireless component and subsystem testing
- Frequency hop and transient signal analysis

Compatibility & Integration

High measurement speed supports rapid VCO and component characterization workflows. Unified phase noise, spectrum analysis, and VCO test platform reduces bench footprint for aerospace, defense, and wireless production environments.

Features & description

From manufacturer datasheet

Features

- Cross-correlation (B60 / B61) improves sensitivity 5/10/15/20 dB for 10/100/1000/10000 correlations • Internal low-noise DC sources for Vtune (minus 10 V to +28 V) and Isupply (10 mA to 2000 mA) • 12.1 inch WXGA touchscreen; SCPI recorder • RF connector APC 3.5 mm male (SMA compatible) • External mixers (B21) extend PN work toward 325 GHz class

Applications

- Absolute and residual phase-noise measurements on oscillators, synthesizers, and radar sources • Automatic VCO characterization versus tune voltage (frequency, power, current, harmonics, PN) • Simultaneous AM and phase noise to 30 MHz offset • Pulsed phase-noise (K4) and additive / residual PN (B64) • Allan deviation / variance for oscillator stability • Optional spectrum analysis, 320 MHz analysis bandwidth class

FSWP26 Characteristics / Specifications

PARAMETER	VALUE
Model	FSWP26
Manufacturer	Rohde & Schwarz
Instrument Type	Phase noise analyzer and VCO tester
Alias	FSWP 26; R&S FSWP26
Order Number	1322.8003.26
Frequency Range DC Coupled	1 MHz to 26.5 GHz
Frequency Range AC Coupled	10 MHz to 26.5 GHz
Frequency Resolution	0.01 Hz
RF Connector	APC 3.5 mm male (SMA compatible)
Reference Aging Standard	plus/minus 1e-7 per year
OCXO FSWP B4 Aging First Year	plus/minus 5e-8
OCXO Temperature Drift	plus/minus 1e-9 from 0 C to +50 C
Typical PN Sensitivity 1 GHz 10 kHz	typ. minus 172 dBc (1 Hz)
Typical PN Sensitivity 10 GHz 10 kHz	typ. minus 158 dBc (1 Hz)
PN Offset Span	concurrent AM and PN to 30 MHz offset
Cross Correlation Improvement	5 dB
Cross Correlation Improvement 100	20 dB
VCO RF Level Range above 100 MHz	minus 20 dBm to +27 dBm
VCO Level Uncertainty below 8 GHz	less than 1 dB (minus 20 to +15 dBm, +20 C to +30 C)
Vtune Output Range	minus 10 V to +28 V
Vtune Output Current	plus/minus 20 mA
Isupply Setting Range	10 mA to 2000 mA
Isupply Setting Resolution	50 µA
Spectrum Analyzer Option B	10 Hz to 26.5 GHz DC coupled
Analyzer DANL Class	minus 156 dBm (1 Hz) without noise cancellation

PARAMETER	VALUE
Analyzer TOI Typical	25 dBm
Display	12.1 inch WXGA 1280 × 800 touchscreen
RF Attenuator	0 dB to 75 dB in 5 dB steps
Maximum CW Input att 0 dB	+20 dBm (0.1 W)
Maximum CW Input att 10 dB	+30 dBm (1 W)
Reference Output 10 MHz	BNC, 10 dBm nom. Notes Specs from the R&S FSWP Phase Noise Analyzer and VCO Tester specifications. Confirm B1 spectrum analyzer, B4 OCXO, B60/B61 cross-correlation, B64 residual PN, and K4 pulsed licenses on the option label.
Bandwidth	class

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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Instrument Type	Phase noise analyzer and VCO tester
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Frequency Resolution	0.01 Hz
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Typical PN Sensitivity 1 GHz 10 kHz	typ. minus 172 dBc (1 Hz)
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PN Offset Span	concurrent AM and PN to 30 MHz offset
Cross Correlation Improvement 10	5 dB
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VCO RF Level Range above 100 MHz	minus 20 dBm to +27 dBm
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Vtune Output Range	minus 10 V to +28 V
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Isupply Setting Range	10 mA to 2000 mA
Isupply Setting Resolution	50 µA
Spectrum Analyzer Option B1	10 Hz to 26.5 GHz DC coupled
Analyzer DANL Class	minus 156 dBm (1 Hz) without noise cancellation
Analyzer TOI Typical	25 dBm

PARAMETER	VALUE
Display	12.1 inch WXGA 1280 x 800 touchscreen
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Reference Output 10 MHz	BNC, 10 dBm nom.

Notes
Specs from the R&S FSWP Phase Noise Analyzer and VCO Tester specifications. Confirm B1 spectrum analyzer, B4 OCXO, B60/B61 cross-correlation, B64 residual PN, and K4 pulsed licenses on the option 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

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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.