

ROHDE & SCHWARZ

FSV30

The Rohde & Schwarz FSV30 is a fast and versatile signal and spectrum analyzer with a frequency range up to 30 GHz. Designed for performance-oriented users in RF system development, production, installation, and servicing, it features a standard 40 MHz analysis bandwidth, touch screen operation, and high-performance RF characteristics including low phase noise and an extremely low displayed average noise level (DANL).

SPECIFICATIONS

General

Interfaces	LAN, USB
Display	8.4-inch color touchscreen
Warm-up Time	30 minutes
Recommended Calibration Interval	1 year

Physical

Power Supply	100 V to 240 V AC, 50 Hz to 400 Hz
Operating Temperature	+5 to +40 °C
Dimensions (W×H×D)	412 × 197 × 417 mm
Weight	10.7 kg

Frequency Characteristics

Frequency Range	10 Hz to 30 GHz
Analysis Bandwidth	28 MHz (standard), up to 160 MHz (with options)

Bandwidth

Resolution Bandwidth (RBW) Range	1 Hz to 10 MHz
Video Bandwidth (VBW) Range	1 Hz to 10 MHz
EMI Resolution Bandwidths (-6 dB)	200 Hz, 9 kHz, 120 kHz, 1 MHz
Channel Filter Bandwidths	100 Hz to 5 MHz

Phase Noise & Spectral Purity

SSB Phase Noise (10 kHz offset)	-110 dBc/Hz
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Amplitude & Level Characteristics

Third-Order Intercept (TOI)	+15 dBm
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Demodulation & Analysis Options

Supported Wireless Standards	GSM/EDGE, WCDMA/HSPA, LTE, WiMAX, WLAN (via optional software)
Analog Demodulation	AM, FM, PM (via optional software)

Inputs & Outputs

Power Sensor Support	Compatible with R&S NRP family sensors
Maximum CW Input Power	+30 dBm (1 W) with ≥ 10 dB RF attenuation
RF Attenuator Range	0 dB to 75 dB (in 5 dB steps)
External Reference Input Frequency	10 MHz

Display & Interface

Touchscreen Capability	Yes
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Physical Specifications

Data Security	Removable hard drive
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Sweep & Trigger

Trigger Sources	Free Run, Video, External, IF Power
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Traces & Detectors

Trace Detectors	Max Peak, Min Peak, Auto Peak, Sample, RMS, Average, Quasi-Peak
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Frequency

Internal Reference Aging	1×10^{-6} / year (standard), 1×10^{-7} / year (with FSV-B4 OCXO option)
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RF Input

Input Impedance	50 Ω
RF Attenuator Step Size	5 dB standard (1 dB with option FSV-B25)

Sweep

Number of Sweep Points	101 to 32001
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Measurements

Standard Measurement Functions	Channel Power, ACLR, OBW, SEM, CCDF, Spurious Emissions
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Analysis

Supported Markers	Up to 16 per trace
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Options

Preamplifier Options	FSV-B22 (up to 7 GHz), FSV-B29 (up to 30 GHz)
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TECHNOLOGY

Spectrum Analysis

APPLICATIONS

RF and Microwave Development, Production, Installation, and Servicing

