ROHDE & SCHWARZ

FSEA30

The Rohde & Schwarz FSEA30 is a high-performance microwave spectrum analyzer from the FSE series, operating from 20 Hz to 3.5 GHz. It features an ultra-wide dynamic range, a high-speed synthesizer, and supports universal analysis of both digital and analog modulated signals via optional upgrades. With a very low displayed average noise level and a robust third-order intercept point, it is engineered for demanding signal analysis applications in RF development and manufacturing.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), RS-232, Centronics, VGA
Display	9.5-inch active LC TFT (24 cm)

Physical

Power Supply	100 to 240 V AC, 50 to 400 Hz
Operating Temperature	0 to +50 °C
Dimensions (W×H×D)	435 × 236 × 460 mm

Frequency Specifications

Frequency Range	20 Hz - 3.5 GHz

Amplitude Specifications

Displayed Average Noise Level (DANL)	-150 dBm typ. (10 Hz RBW)
1 dB Compression Point	+10 dBm

Dynamic Range and Spurious Responses

Third-Order Intercept (TOI)	+20 dBm typ.

Sweep and Trigger Specifications

Sweep Time Range (Zero Span)	1 µs - 2500 s (5% steps)
Sweep Time Range (Span > 0 Hz)	5 ms - 16000 s (≤10% steps)
Sweep Points	500

Inputs and Outputs

RF Input Impedance	50 Ω
RF Input Connector	N(f)

Bandwidth

Resolution Bandwidth (RBW)	1 Hz to 10 MHz (1, 2, 3, 5 sequence)
Video Bandwidth (VBW)	1 Hz to 10 MHz (1, 2, 3, 5 sequence)

Inputs & Outputs

Input Attenuator	0 to 70 dB, in 10 dB steps
Max Continuous Input Power	+30 dBm (1 W) with >= 10 dB RF attenuation
Max DC Input Voltage	50 V (AC coupled), 0 V (DC coupled)

Amplitude

Reference Level Range	-130 dBm to +30 dBm
Detectors	Max Peak, Min Peak, Auto Peak, Sample, RMS

TECHNOLOGY

Spectrum Analysis

APPLICATIONS

RF/Microwave Test, Signal Analysis