Aumictech
Test & measurement · bought, sold, repaired, calibrated

Data Sheet
August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz ESL3 EMI Test Receiver

Rohde & Schwarz ESL3 EMI Test Receiver 9 kHz to 3 GHz The R&S ESL3 is the 3 GHz entry-level EMI test receiver / spectrum analyzer (order 1300.5001.03; tracking-generator variant 1300.5001.13). Frequency range is 9 kHz to 3 GHz covering almost all commercial EMC standards. It is the first combination of an EMI test receiver andafull-featured spectrum analyzer in the entry-level class, with CISPR 16-1-1 weighting detectors including quasi-peak, CISPR-average, and RMS-average. Amplitude accuracy is 0.5 dB below 3 GHz. Optional FSL-B22 preamplifier, FSL-B4 OCXO, and battery pack support lab and mobile precompliance. The R&S ESL3 is the 3 GHz entry-level EMI test receiver / spectrum analyzer (order 1300.5001.03; tracking-generator variant 1300.5001.13). Frequency range is 9 kHz to 3 GHz covering almost all commercial EMC standards. It is the first combination of an EMI test receiver andafull-featured spectrum analyzer in the entry-level class, with CISPR 16-1-1 weighting detectors including quasi-peak, CISPR-average, and RMS-average. Amplitude accuracy is 0.5 dB below 3 GHz. Optional FSL-B22 preamplifier, FSL-B4 OCXO, and battery pack support lab and mobile precompliance.

MODEL **Rohde & Schwarz ESL3**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **ESL3**	LISTING **https://aumictechlabs.com/products/esl3-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Rohde & Schwarz ESL3 EMI Test Receiver combines EMI receiver and spectrum analyzer functionality into a single portable instrument for precompliance and development lab

measurements. Operating from 9 kHz to 3 GHz with 1 Hz frequency resolution, it delivers amplitude measurement accuracy of 0.5 dB and displayed average noise level of typically -162 dBm. The instrument features pulse-resistant RF input handling up to 10 mWs and a measurement range of -70 dBm to +23 dBm.Technical Specifications Frequency Range: 9 kHz to 3 GHz Frequency Resolution: 1 Hz Frequency Span: 0 Hz, 10 Hz to 3 GHz (span uncertainty 3%) Amplitude Measurement Accuracy: 0.5 dB up to 3 GHz Measurement Range: -70 dBm to +23 dBm 1 dB Compression Point: +5 dBm Displayed Average Noise Level: Typically -162 dBm at 500 MHz; < -152 dBm with preamplifier (1 Hz) RF Input: Pulse-resistant up to 10 mWs Resolution Bandwidths: 10 Hz to 10 MHz (-3 dB); 200 Hz, 9 kHz, 120 kHz (-6 dB); 1 MHz impulse SSB Phase Noise (500 MHz): -95 dBc (1 Hz) at 1 kHz offset; < -98 dBc typically -103 dBc at 10 kHz offset Frequency Counter Resolution: 1 Hz Physical Dimensions: 408.8 mm × 158.1 mm × 465.3 mm; 7 kgKey Features Multiple detection modes: Peak (Max/Min), Average, RMS, Quasi-peak, CISPR Average, CISPR RMS CISPR 16-1-1 compliant weighting detectors Fully automated test sequences Variable sweep time capability Optional tracking generator, OCXO reference, RF amplifier, and gated sweep function NiMH battery pack available for mobile operation Rugged case included as standardInterfaces & Integration LAN, USB, and IEC/IEEE bus connectivity Video output, IF output, and noise output available with options Optional DC power supply and external charger unitTypical Applications Precompliance EMC testing Development lab measurements Field deployments up to 3000 m altitude Standards compliance verification: CISPR, EN, ETS, FCC, ANSI

Features & description

From manufacturer datasheet

Features

• Detectors: pos/neg peak, auto peak, quasi-peak, RMS, average, sample, CISPR average, CISPR RMS • RBW 10 Hz to 10 MHz (3 dB); CISPR 200 Hz, 9 kHz, 120 kHz, 1 MHz impulse • Compact, about 7 kg; LAN and USB; optional GPIB (B10) • Optional AM/FM/PM demodulator K7, noise-figure K30, power-sensor K9 • Sibling ESL6 to 6 GHz

Applications

• Precompliance EMI diagnostics to 3 GHz • Fully automated EMI test sequences • Spectrum analysis in the development lab • Optional tracking-generator scalar measurements (1 MHz to 3 GHz) • Battery-powered on-site surveys (B31)

ESL3 Characteristics / Specifications

PARAMETER	VALUE
Model	ESL3
Manufacturer	Rohde & Schwarz
Instrument Type	EMI test receiver / spectrum analyzer
Alias	ESL 3; R&S ESL3
Order Number	1300.5001.03
Order Number with TG	1300.5001.13
Frequency Range	9 kHz to 3 GHz
Frequency Accuracy Standard	1e-6
OCXO FSL B4 Accuracy	1e-7
Receiver Measurement Time	100 µs to 100 s per step
Analyzer Sweep Time	2.5 ms to 16000 s; zero span 1 µs to 16000 s
RBW 3 dB	10 Hz to 10 MHz in 1/3 sequence
RBW 6 dB EMI	200 Hz, 9 kHz, 120 kHz, 1 MHz (impulse)
Video Bandwidth	1 Hz to 10 MHz in 1/3 sequence
Max RF Level att 10 dB	+30 dBm (1 W)
Max Pulse Energy	10 mWs
Max Pulse Voltage	150 V
TOI	typically +18 dBm
Compression Point 1 dB	+5 dBm
DANL with FFT 1 Hz and B22 preamp at 500 MHz	typically minus 162 dBm
DANL with FFT 1 Hz and B22 at 3 GHz	typically minus 158 dBm
DANL 9 kHz to 3 MHz with preamp	typically minus 115 dBm
Level Uncertaintyfless than 3 GHz	less than 0.5 dB
Tracking Generator Range	1 MHz to 3 GHz (TG model)
Tracking Generator Level	minus 20 dBm to 0 dBm

PARAMETER	VALUE
RF Input	N female, 50 ohm
Display	640 × 480 pixels
Dimensions	408.8 mm x 158.1 mm x 465.3 mm
Weight	7 kg
Interfaces	LAN, USB; optional GPIB B10
Preamplifier Option	FSL-B22
Battery Option	FSL-B31 NiMH
Sibling ESL6 Range	9 kHz to 6 GHz Notes Specs from the R&S ESL EMI Test Receiver brochure/fact sheet. Confirm tracking-generator SKU (.13), B22 preamp, B4 OCXO, and K-options. This file is the 3 GHz ESL3, not ESL6.
Detectors	pos/neg peak, auto peak, quasi-peak, RMS, average, sample, CISPR average, CISPR RMS
Bandwidth	1 Hz to 10 MHz in 1/3 sequence

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	ESL3
Manufacturer	Rohde & Schwarz
Instrument Type	EMI test receiver / spectrum analyzer
Alias	ESL 3; R&S ESL3
Order Number	1300.5001.03
Order Number with TG	1300.5001.13
Frequency Range	9 kHz to 3 GHz
Frequency Accuracy Standard	1e-6
OCXO FSL B4 Accuracy	1e-7
Receiver Measurement Time	100 µs to 100 s per step
Analyzer Sweep Time	2.5 ms to 16000 s; zero span 1 µs to 16000 s
RBW 3 dB	10 Hz to 10 MHz in 1/3 sequence
RBW 6 dB EMI	200 Hz, 9 kHz, 120 kHz, 1 MHz (impulse)
Video Bandwidth	1 Hz to 10 MHz in 1/3 sequence
Max RF Level att 10 dB	+30 dBm (1 W)
Max Pulse Energy	10 mWs
Max Pulse Voltage	150 V
TOI	typically +18 dBm
Compression Point 1 dB	+5 dBm

DANL with FFT 1 Hz and B22 preamp at 500 MHz: typically minus 162 dBm
DANL with FFT 1 Hz and B22 at 3 GHz: typically minus 158 dBm
DANL 9 kHz to 3 MHz with preamp: typically minus 115 dBm

Specifications

PARAMETER	VALUE
Level Uncertaintyfless than 3 GHz	less than 0.5 dB
Tracking Generator Range	1 MHz to 3 GHz (TG model)

PARAMETER	VALUE
Tracking Generator Level	minus 20 dBm to 0 dBm
RF Input	N female, 50 ohm
Display	640 x 480 pixels
Dimensions	408.8 mm x 158.1 mm x 465.3 mm
Weight	7 kg
Interfaces	LAN, USB; optional GPIB B10
Preamplifier Option	FSL-B22
Battery Option	FSL-B31 NiMH
Sibling ESL6 Range	9 kHz to 6 GHz

Notes
Specs from the R&S ESL EMI Test Receiver brochure/fact sheet. Confirm tracking-generator SKU (.13), B22 preamp, B4 OCXO, and K-options. This file is the 3 GHz ESL3, not ESL6.

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