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Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz ESHS30 9KHz â€” 30MHz EMI Test Receiver

Rohde & Schwarz ESHS30 EMI Test Receiver 9 kHz to 30 MHz The R&S ESHS30 is the enhanced-feature 9 kHz to 30 MHz member of the ESHS commercial EMI receiver family. RF characteristics match ESHS10: double-conversion heterodyne, 10 Hz frequency resolution, 200 Hz / 10 kHz IF bandwidths, 10 dB switchable preamplifier, and five fixed preselector filters. ESHS30 addsascreen, floppy-disk drive, tracking generator, and IF analyzer for test-house work where the EUT type changes often. Detectors are average, peak, and quasi-peak to CISPR 16 and VDE 0876. The R&S ESHS30 is the enhanced-feature 9 kHz to 30 MHz member of the ESHS commercial EMI receiver family. RF characteristics match ESHS10: double-conversion heterodyne, 10 Hz frequency resolution, 200 Hz / 10 kHz IF bandwidths, 10 dB switchable preamplifier, and five fixed preselector filters. ESHS30 addsascreen, floppy-disk drive, tracking generator, and IF analyzer for test-house work where the EUT type changes often. Detectors are average, peak, and quasi-peak to CISPR 16 and VDE 0876.



MODEL

Rohde & Schwarz ESHS30

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

ESHS30

LISTING

<https://aumictechlabs.com/products/eshs30-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Rohde & Schwarz ESHS30 is a double-conversion heterodyne EMI test receiver engineered for precision electromagnetic interference measurements across 9 kHz to 30 MHz. Built for compliance testing and interference analysis, it delivers high sensitivity with parallel detectors for average, peak, and

quasi-peak indication, supported by switchable preamplification and comprehensive preselection filtering. All functions are fully programmable via IEEE 488 (GPIB) interface.

Technical Specifications

Frequency Range: 9 kHz to 30 MHz with 10 Hz resolution and 0.00000000000001 % accuracy. Frequency drift remains below $3 \times 10^{-6} + 30$ Hz. **Level Measurement:** Operating range of -36 to +137 dB μ V with maximum input level of +30 dBm (AC) and 7 V DC maximum. Displayed average noise spans -148 dBm minimum to -124 dBm maximum. Dynamic range is typically 70 dB or 60 dB for quasi-peak and average value indication respectively. **Performance:** Noise figure is typically 6 dB with preamplifier or 10 dB without. Third order intercept point: typically 20 dBm. Measurement accuracy: typically 0.5 dB error. IF bandwidth selections of 200 Hz and 10 kHz accommodate diverse measurement requirements. **Power Supply:** Battery or AC supply with universal auto-sensing input.

Key Features

- Switchable preamplifier with wide dynamic range
- Five fixed-tuned filters or comprehensive preselection options
- 7-digit LCD and CRT graphical display
- Built-in loudspeaker for audio monitoring
- Tracking generator for cable loss and filter attenuation measurement
- Integrated IF analyzer for interference spectrum monitoring
- Automatic measurement macros for test routines
- Self-calibration and test facilities
- Floppy disk drive for data storage
- External 10 MHz frequency reference input
- External video output capability

Typical Applications

EMI/RFI compliance testing, radiated and conducted interference analysis, equipment certification per CISPR and VDE standards, frequency scanning and limit testing, transducer factor configuration.

Compatibility & Integration

Compliant with CISPR 16-1, VDE 0876, ANSI C63.2, ANSI C63.4, EN 55011 to 55022, ETS, FCC, VCCI, and VDE 0871 to 0879. Full programmability via IEEE 488 interface enables integration into automated test systems.

Features & description

From manufacturer datasheet

Features

• Same RF front end as ESHS10; extra UI and tracking/IF-analyzer hardware • Automatic scan, macros, and IEC-bus programming • Typical measurement error 0.5 dB class; typical noise figure 7 dB with preamp • TOI typically +20 dBm without preamp • AC, internal 12 V battery, or external 11–33 V DC

Applications

• Commercial conducted EMI (CISPR 16, EN 55011–55022, FCC, VCCI, VDE) • Test-house and QA measurements on changing EUTs • Cable-loss, filter, and site-attenuation checks with the tracking generator • Manual spectrum monitoring via the IF analyzer • Field-strength work with coded antennas

ESHS30 Characteristics / Specifications

PARAMETER	VALUE
Model	ESHS30
Manufacturer	Rohde & Schwarz
Instrument Type	EMI test receiver
Alias	ESHS 30; R&S ESHS30
Frequency Range	9 kHz to 30 MHz
Frequency Resolution	10 Hz
Frequency Steps	10 Hz, 10 kHz, or user step
Frequency Drift	less than $3e-6 + 30$ Hz
RF Input	N, 50 ohm
VSWR att 10 dB	less than 1.2
VSWR att 0 dB	less than 2
Preamplifier	10 dB, between preselector and 1st mixer
Preselector	5 fixed tuned filters
IF Bandwidths	200 Hz and 10 kHz
Detectors	average, peak, quasi peak
Max DC Input	7 V (1 W)
Max Sinewave Input	137 dB μ V (att greater than or equal to 10 dB)
Image Rejection 1st IF	greater than 90 dB, typ. 100 dB
Image Rejection 2nd IF	greater than 75 dB
IF Rejection	greater than 90 dB, typ. 100 dB
TOI without Preamp above 2 MHz	greater than 15 dBm, typ. +20 dBm
Second Order Intercept	greater than 40 dBm without preamp
Display ESHS	screen plus floppy disk (versus 7 digit LCD on ESHS10)
Tracking Generator	included on ESHS30
IF Analyzer	included on ESHS30

PARAMETER	VALUE
Mains	100/120/220/240 V plus/minus 10%, 47 to 440 Hz
Internal Battery	12 V, 10 Ah, about 2.5 h
External Battery	11 V to 33 V
Remote Interface	IEC IEEE bus
External Reference	5/10 MHz BNC
Sibling ESHS	same RF, 7 digit LCD, no TG / IF analyzer
Standards	CISPR 16, VDE 0876, ANSI C63.2 Notes Specs from the R&S ESHS10/30 and ESS EMI test receiver data sheet. RF tables are the shared ESHS row; the 30 suffix adds screen, floppy, tracking generator, and IF analyzer. Confirm those extras on the faceplate versus an ESHS10.
Attenuation	checks with the tracking generator - Manual spectrum monitoring via the IF analyzer - Field-strength work with coded antennas

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.

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Max Pulse Voltage 10 μ s: 700 V
Max Pulse Energy 10 μ s: 100 mWs

Specifications

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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

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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.