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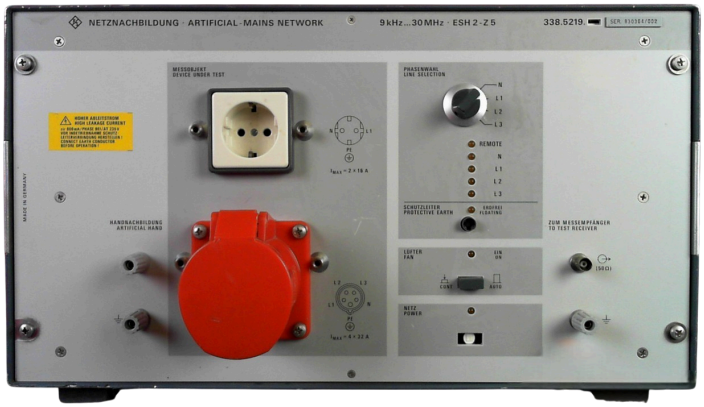
Data Sheet
August 13, 2026

ROHDE & SCHWARZ

Rohde and Schwarz ESH Test Receiver

Rohde & Schwarz ESH Test Receiver 9 kHz to 30 MHz The R&S ESH family (ESH2 / ESH3) isaclassic HF measuring and EMI test receiver covering 9 kHz to 30 MHz. It measures and demodulates AM DSB, SSB, pulse-modulated, and FM signals plus interference. Sensitivity spans about minus 30 dBµV to +137 dBµV. Four IF bandwidths (0.2 / 0.5 / 2.4 / 10 kHz) and average, peak, and CISPR quasi-peak detectors support CISPR 16 and VDE 0876. ESH3 adds synthesizer tuning and IEC-bus automation; ESH2 is the high-dynamic manual sibling. The R&S ESH family (ESH2 / ESH3) isaclassic HF measuring and EMI test receiver covering 9 kHz to 30 MHz. It measures and demodulates AM DSB, SSB, pulse-modulated, and FM signals plus interference. Sensitivity spans about minus 30 dBµV to +137 dBµV. Four IF bandwidths (0.2 / 0.5 / 2.4 / 10 kHz) and average, peak, and CISPR quasi-peak detectors support CISPR 16 and VDE 0876. ESH3 adds synthesizer tuning and IEC-bus automation; ESH2 is the high-dynamic manual sibling.



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

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

NAICS 423690 · 811210 · 541380

This unit

The Rohde & Schwarz ESH is a multifunction test receiver engineered for field strength measurement, selective RF analysis, and automated test system integration. It demodulates AM, double sideband, single-sideband, pulse modulated, and FM signals while detecting interference across its operating band. The instrument delivers average, peak, and quasi-peak indications

traceable to CISPR16 and VDE0876 standards, with programmable measurement times for time-dependent signal characterization.Technical Specifications ESH 3 Test Receiver Frequency range: 9 kHz to 30 MHz Sensitivity: −30 dBµV to +137 dBµV IF bandwidths: 0.2 kHz, 0.5 kHz, 2.4 kHz, 10 kHz (four selectable) Attenuator range: 110 dB Gain measurement range: 57 dB IF output: 75 MHz broadband for panoramic display or spectrum analyzer connection Measurement modes: Low-noise or low-distortion operation Modulation analysis: Frequency offset, frequency deviation, modulation depth Automatic linearity testing distinguishes device nonlinearity from test item nonlinearity ESH3-Z6 Single-Line V-Network Frequency range: 100 kHz to 200 MHz Simulated impedance: 5 µH || 50 Ω Continuous current: Up to 100 A Surge current: Up to 500 A (maximum 30 seconds) Standards: CISPR 25/EN 55025, DEF-STAN 59-411, DO-160; alternative for MIL-STD-461 on specified platforms Construction: Air-core inductors with screw terminals and protective plastic covers ESH3-Z5 Two-Line V-Network (LISN) Frequency range: 9 kHz to 30 MHz Load impedance: 50 µH + 5 Ω shunted by 50 Ω Continuous current: 2 × 10 A Maximum short-time current: 2 × 16 A (30 minutes) Maximum AC supply: 250 V rms at 63 Hz Standards: VDE0876, CISPR16-1 Features artificial hand and PE network simulationKey Features Excellent receiver selectivity for accurate measurement amid large level differences and multiple simultaneous signals Digital level indication with selectable units Air-core inductor construction in coupling networks for low-impedance connections Broadband IF output for external panoramic display integrationTypical Applications EMC pre-compliance and radiated/conducted emissions testing Disturbance voltage measurement in automotive and aerospace power supplies AC-powered load interference characterization Signal demodulation and modulation parameter extractionCompatibility & Integration The ESH3 integrates with the Spectrum Monitor EZM for panoramic display operation and functions as a system unit within automated measurement environments.

Features & description

From manufacturer datasheet

Features

• Triple conversion: 1st IF 75 MHz, 2nd IF 9 MHz, 3rd IF 30 kHz (ESH2 class) • 75 MHz broadband IF out for EZM panoramic / spectrum display • 30 kHz narrowband IF out for an oscilloscope • Calibration generator about 50 dBµV plus/minus 0.5 dB into 50 ohm at the tuned frequency (ESH3) • AC and 12 V battery operation on ESH2

Applications

• CISPR / VDE / MIL / VG conducted EMI from 9 kHz to 30 MHz • Field-strength measurements with HFH2-Z1 rod, HFH2-Z2 loop, or HFH2-Z4 probes • Selective RF voltmeter and RF current-probe measurements • Automatic racks (ESH3 with IEC IEEE bus) • Attenuation and return-loss work with the built-in calibration generator (ESH3)

ESH Characteristics / Specifications

PARAMETER	VALUE
Model	ESH (ESH2 / ESH3 family)
Manufacturer	Rohde & Schwarz
Instrument Type	HF EMI / measuring test receiver
Alias	ESH2; ESH3; ESH 2; ESH 3
Frequency Range	9 kHz to 30 MHz
Frequency Resolution ESH	100 Hz (10 kHz / 1 kHz / 100 Hz steps)
Level Range	minus 30 dBµV to +137 dBµV
Level Dynamic Class	greater than 165 dB (ESH2 statement)
IF Bandwidths	0.2 kHz, 0.5 kHz, 2.4 kHz, 10 kHz
Detectors	average, peak, quasi peak (CISPR 16 / VDE 0876)
IF First	75 MHz
IF Second	9 MHz
IF Third	30 kHz
Demodulation Modes	A0, A1, A3, A3J USB/LSB, F3
Broadband IF Output	75 MHz for panoramic adapter
Narrowband IF Output	30 kHz
Calibration Generator Level	50 dBµV plus/minus 0.5 dB into 50 ohm (ESH3)
Attenuation Measurement Range	to 110 dB (ESH3 with cal generator)
Gain Measurement Range	to 57 dB (ESH3 with cal generator)
RF Input Impedance	50 ohm class
ESH2 Dimensions	347 × 206 × 485 mm
ESH3 Dimensions	490 × 207 × 515 mm
ESH3 Weight	25.5 kg
ESH2 Supplies	100 to 120 V / 220 to 240 V AC and 12 V DC
Remote Interface ESH	IEC 625-1 / IEEE 488, talk-only printer mode

PARAMETER	VALUE
Field Strength with HFH2 Antennas	about minus 3 dBµV/m to +140 dBµV/m
Linearity Check	automatic linearity test and RF overload indication Notes Specs from R&S ESH2 / ESH3 OEM and Radiomuseum model notes. This file covers the classic ESH family, not the later ESHS10/30. Confirm ESH2 versus ESH3, CISPR weighting option (model 52), and antenna set on the unit.
Triple conversion	1st IF 75 MHz, 2nd IF 9 MHz, 3rd IF 30 kHz (ESH2 class)
Attenuation	and return-loss work with the built-in calibration generator (ESH3)

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	ESH (ESH2 / ESH3 family)
Manufacturer	Rohde & Schwarz
Instrument Type	HF EMI / measuring test receiver
Alias	ESH2; ESH3; ESH 2; ESH 3
Frequency Range	9 kHz to 30 MHz
Frequency Resolution ESH2	100 Hz (10 kHz / 1 kHz / 100 Hz steps)
Frequency Resolution ESH3	100 Hz synthesizer
Level Range	minus 30 dBµV to +137 dBµV
Level Dynamic Class	greater than 165 dB (ESH2 statement)
IF Bandwidths	0.2 kHz, 0.5 kHz, 2.4 kHz, 10 kHz
Detectors	average, peak, quasi peak (CISPR 16 / VDE 0876)
IF First	75 MHz
IF Second	9 MHz
IF Third	30 kHz
Demodulation Modes	A0, A1, A3, A3J USB/LSB, F3
Broadband IF Output	75 MHz for panoramic adapter
Narrowband IF Output	30 kHz
Calibration Generator Level	50 dBµV plus/minus 0.5 dB into 50 ohm (ESH3)
Attenuation Measurement Range	to 110 dB (ESH3 with cal generator)
Gain Measurement Range	to 57 dB (ESH3 with cal generator)
RF Input Impedance	50 ohm class
ESH2 Dimensions	347 x 206 x 485 mm
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ESH3 Weight	25.5 kg
ESH2 Supplies	100 to 120 V / 220 to 240 V AC and 12 V DC
Remote Interface ESH3	IEC 625-1 / IEEE 488, talk-only printer mode

PARAMETER	VALUE
Field Strength with HFH2 Antennas	about minus 3 dBµV/m to +140 dBµV/m
Linearity Check	automatic linearity test and RF overload indication

Notes

Specs from R&S ESH2 / ESH3 OEM and Radiomuseum model notes. This file covers the classic ESH family, not the later ESHS10/30. Confirm ESH2 versus ESH3, CISPR weighting option (model 52), and antenna set on the unit.

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

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