Rhode and Schwarz EMC system

This is a complete one-stop integrated EMC measuring system, interconnected via a GPIB (IEEE 488) bus.

Please telephone 01778 560535 if you want to discuss.

ESH3



9kHz to 30MHz Test Receiver.

The Automatic Test Receiver ESH 3 measures and demodulates AM, double sideband, single-sideband, pulse modulated and FM signals as well as interference in the range of 9 kHz to 30 MHz. It is suitable for manual and programmed use as a

- Field strength meter in conjunction with suitable test antennas
- Selective RF-voltmeter (in conjunction with a current probe, it can also measure RF currents)
- System unit in automatic test systems.

It provides the following extra features and functions:

Sensitivity range: -30 to +137 dB MicroV.

4 selectable IF bandwidths: 0.2/0.5/2.4/10 kHz.

Average, peak and quasi peak indication to CISPR16 and VDE0876 with programmable measuring times.

75 MHz broadband IF output for panoramic display (for example spectrum monitor EZM) or spectrum analyzer.

Digital level indication in selectable units.

Measurement of frequency offset, frequency deviation and modulation depth.

ESVP

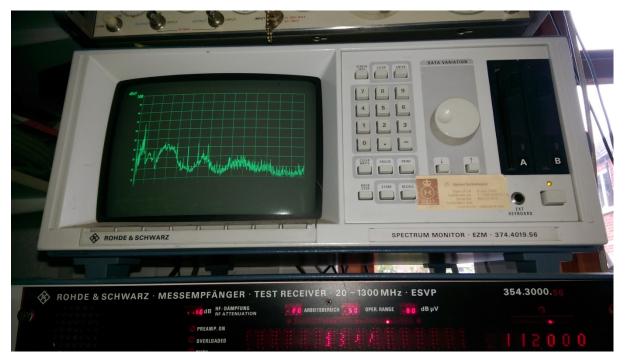


- Frequency range: 20 MHz to 1.3 GHz
- UHF/VHF Test Receiver
- 8-digit LED display
- Resolution: 1 kHz/100 Hz (SSB)
- High measurement accuracy (error <1 dB)
- Wide dynamic range: noise figure typically 8 dB (preamplifier on); 3rd-order IP typically
 +20 dBm (preamplifier off)
- Field-strength measurements with test antennas
- RFI measurements to CISPR, VDE, and FCC
- Interference measurements to MIL and VG standards (with model 56)
- Radio monitoring
- AC supply and battery operation
- Synthesizer: Frequency resolution 1 kHz, with SSB 100 Hz
- Automatic frequency scanning with constant and frequency-proportional step sizes;
 automatic scanning with up to 50 preset fixed frequencies
- Automatic gain correction in the whole frequency range after calibration (sinewave calibration as well as pulse calibration for broadband interference measurements)
- Measurement of voltage, field strength, current, spectral pulse density and two port attenuation with display of physical units; automatic, consideration of probe and bandwidth correction factors; input of any frequency-dependent correction factors (current probes, antennas) as well as of frequency-dependent attenuation or gain possible
- Additional evaluation capabilities for radio monitoring; modulation-depth and frequency-deviation measurements, remote frequency and frequency-offset measurements with the aid of built-in IF counter, recording of band occupancy, SSB demodulator, AF filter and squelch with programmable response threshold, built-in loudspeaker, indication of date and time of day
- Fast automatic field-strength recording in moving vehicle (field-strength statistics)
- Facilities for connection of XY, YT recorders and up to 5 Radio monitoring Recorders ZSG 3 from Rohde and Schwarz

- IEC-bus interface with listener and talker function; talk-only mode for data recording without controller
- Non-volatile storage of 10 complete device settings, 5 data sets for automatic frequency scanning, one data set with 50 fixed frequencies and two data sets for correction factors
- Full compatibility with Test Receiver ESH 3 (9 kHz TO 30 MHz) with respect to operational concept and IEC-bus commands
- Connectors for AC supply and 24-V battery

EZM





The Rohde & Schwarz EZM is a Spectrum Monitor and control for ESH3 and ESVP. The main function of the spectrum monitor EZM is the spectral display of the RF signals applied to the input of test receivers ESH3 and ESVP. The EZM provides

- IF analysis,
- RF analysis and
- combined RF/IF analysis

The EZM also acts as a process controller for graphical representation of the receiver's test results.

HP plotter



The plotter connects to the IEEE bus of the ESH3/EZM/ESVP system to produce beautiful hard copies of the EMC graphs.

EMCO LISN





This is used to safely and accurately measure the amount of interference injected into the mains supply by the device under test.

General

The system comes with a comprehensive set of genuine printed manuals, plus a copy of everything I have ever been able to find on the internet.

There is also a wide band antenna and calibrated preamp.

