

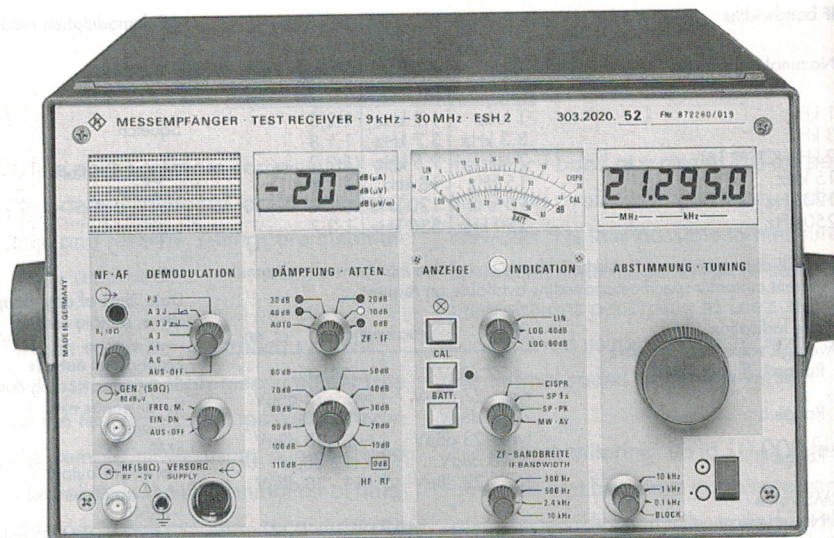
Test Receivers ESH2, ESV

ESH2: 9 kHz to 30 MHz

ESV: 20 to 1000 MHz

Manually operated, universal
test receivers for interference
and fieldstrength measure-
ments

Photo: ESH2



Uses

The Test Receivers ESH2 and ESV feature manual operation, high sensitivity and high overload protection. Compact size, wide variety of power sources and low power consumption make these receivers suitable both for stationary and mobile use.

Automatic calibration and high selectivity enable accurate measurements of closely spaced signals with very different levels.

Examples

SSB two-tone measurements, spurious and sideband-noise measurements on signal generators, intermodulation and distortion measurements, measurement of noise figure.

Interference measurements can be made in line with CISPR, MIL, VG and VDE standards. A variety of accessories (see page 94) is available for this purpose. The main applications in fieldstrength measurements are radio-monitoring as well as propagation and coverage measurements.

Characteristics

- Four IF bandwidths selectable
- Broadband IF output for connecting a panoramic display or a wave analyzer
- Narrowband IF output for connecting an oscilloscope
- AM, FM demodulator outputs
- Outputs for recording of level (ESH 2 only) and frequency offset
- Outputs for XY recorder
- Output for frequency counter (ESH 2 only)

Condensed data of ESH2

| | |
|--|--|
| Frequency range | 9 kHz to 29.9999 MHz |
| Setting error | $<1.5 \times 10^{-5} \times f_m + 50$ Hz |
| Input level range | -30 to +137 dB μ V |
| Maximum pulse energy (T = 10 μ s) | 1 mWs |
| Image-frequency rejection (1st IF) | >100 dB, typ. 120 dB |
| IF rejection | >100 dB, typ. 120 dB |
| Intermediate frequencies (1st/2nd/3rd) | 75 MHz/9 MHz/30 kHz |
| IF bandwidths (nominal) | 200 Hz/500 Hz/2.4 kHz/10 kHz |
| -6 dB (CISPR 1, 3 and VDE 0875) | 200 Hz/9 kHz (aut. switchover) |
| Display modes | average, peak, peak with 1 s hold time, CISPR (Publ. 1, 3) |
| Demodulation modes | A0, A1, A3, A3J, F3 |
| General Data | |
| Power supply, AC supply unit | 110/125/220/235 V +10/-15%, 47 to 420 Hz, 60 VA |
| Battery pack | +12 V, 9 Ah, approx. 4 h operation per charge |
| Dimensions (W x H x D); weight | 347 mm x 206 mm x 484 mm; 19 kg |

Ordering information

Test Receiver
Extras

ESH2
see page 97

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Condensed data of ESV

| | |
|--|--|
| Frequency ranges | 20 to 519.999/ 520 to 999.999 MHz |
| Setting error | $<1.0 \times 10^{-5}$ |
| Input level range | -10 to +137 dB μ V |
| Maximum pulse energy (T = 10 μ s) | 1 mWs |
| Image-frequency rejection (1st IF) | >80 dB, typ. 100/90 dB (low./up.) |
| IF rejection | >80 dB, typ. 100/90 dB (low./up.) |
| Intermediate frequencies (1st lower/upper/2nd) | 810.7 MHz/310.7 MHz/10.7 MHz |
| IF bandwidths (nominal) | 7.5/12/120/1000 kHz |
| -6 dB (CISPR 2, 4 and VDE 0875) | 120 kHz (autom. selected for CISPR) |
| Display modes | average, peak, peak with 1 s hold time, CISPR (quasi-peak) |
| Demodulation modes | A0, A3, F3 |
| General Data | |
| Power supply, AC supply unit | 110/125/220/235 V +10/-15%, 47 to 420 Hz, 70 VA |
| Battery pack | +12 V, 9 Ah, approx. 3 h operation per charge |
| Dimensions (W x H x D); weight | same as ESH2; 21 kg with battery pack |

Ordering information

Test Receiver
Extras

ESV
see page 97

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