R&S®HM525 Active H-Field Measurement Antenna

100 Hz to 30 MHz

Extremely high sensitivity measurement of alternating magnetic fields





The R&S[®]HM525 active H-field measurement antenna is a loop antenna. The voltage at its output is proportional to the amplitude of the alternating magnetic field that is present.

Overview measurements are performed in the broadband mode, which covers the entire frequency range from 100 Hz to 30 MHz. To obtain maximum sensitivity, the antenna can be locally or remotely switched to the subrange mode. The frequency range is then divided into five subranges with different amplifier concepts in the active antenna part.

For a function check, the antenna can be operated in the test mode. The antenna is individually calibrated by comparison method and comes with a calibration certificate.

Key facts

- I Extremely high sensitivity
- I Wide dynamic range
- I Wide frequency range
- I Compact design
- I Selftest possible
- Remote control capability (optional)
- I Calibration certificate supplied with antenna

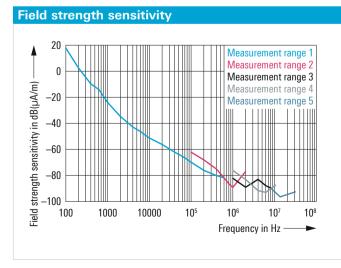
HF Antennas R&S®HM525 Active H-Field Measurement Antenna



Specifications	
Frequency range	
Broadband mode	100 Hz to 30 MHz
Subrange mode	
Range 1	100 Hz to 600 kHz
Range 2	600 kHz to 1.2 MHz
Range 3	1.2 MHz to 2.6 MHz
Range 4	2.6 MHz to 8 MHz
Range 5	8 MHz to 30 MHz
Input impedance	50 Ω
Field strength sensitivity	see diagrams
Calibration	by comparison (as standard)

Power supply	18 V ±0.5 V DC (max. 0.7 A)	
RF connector	N female	
Test signal connector	N female	
MTBF	> 300 000 h	
Operating temperature range	-10°C to +55°C	
Dimensions (W × H × D)	approx. 640 mm × 730 mm × 400 mm (25.2 in × 28.7 in × 15.8 in) (without support)	
Weight	approx. 10 kg (22.5 lb)	
Class of application	laboratory	

Ordering information	Туре	Order No.
Active H-Field Measurement Antenna	R&S®HM525	4031.0508.02
Recommended extras		
Pedestal	R&S®HM525Z1	4036.1402.02
Control Unit	R&S®GS525	4035.5004.02
Set of Fiber-Optic Cables	R&S®GS525K1	4035.5604.02
Junction Unit	R&S®GX525	4015.9256.02
Cabinet for Junction Unit	R&S®KK524	4015.9004.02
Integration	R&S®AM524-K	4015.7024.02



Bandwidth = 1 Hz; S/N ratio = 0 dB (measurement ranges 1 to 5 active).

Field strength sensitivity in broadband mode

