

HF Antennas

Active H-Field Measurement Antenna R&S®HM525



100 Hz to 30 MHz

Measurement of alternating magnetic fields with extremely high sensitivity

Features

- ◆ Extremely high sensitivity
- ◆ Wide dynamic range
- ◆ Wide frequency range
- ◆ Compact design
- ◆ Selftest possible
- ◆ Remote-control capability (optional)

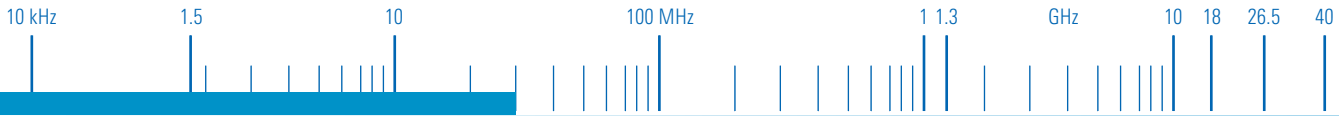


Brief description

The Measurement Antenna R&S®HM525 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. In this case the frequency range is 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 and comes with a calibration report.



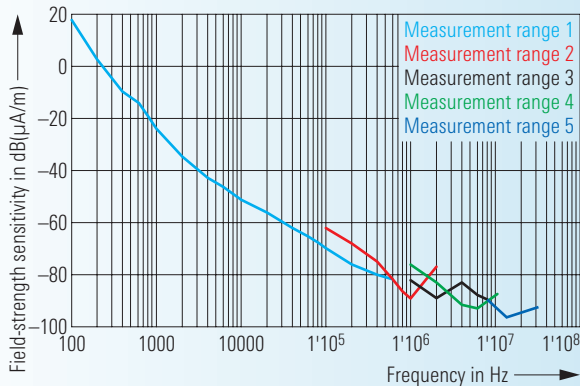
Specifications

Frequency range		Power supply	
Broadband mode	100 Hz to 30 MHz	RF connector	18 V \pm 0.5 V DC (max. 0.7 A)
Subrange mode		Test signal connector	N female
Range 1	100 kHz to 600 kHz	MTBF	>300 000 h
Range 2	600 kHz to 1.2 MHz	Operating	
Range 3	1.2 MHz to 2.6 MHz	temperature range	-10°C to +55°C
Range 4	2.6 MHz to 8 MHz	Dimensions (H \times W \times D)	
Range 5	8 MHz to 30 MHz	approx. 730 mm \times 640 mm \times 400 mm (without support)	
Input impedance	50 Ω	Weight	
Field-strength sensitivity	see diagram	approx. 10 kg	
Calibration	by comparison (as standard)	Class of application	
		laboratory	

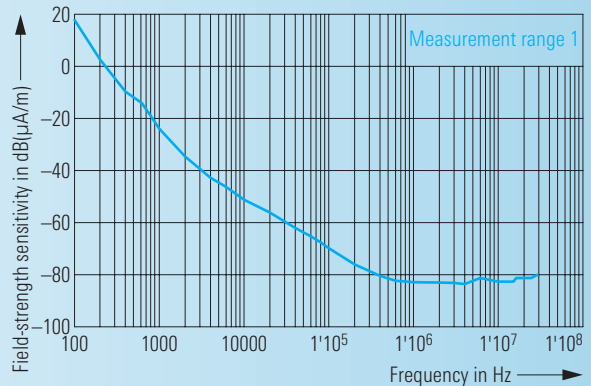
Ordering information

Active H-Field		
Measurement Antenna	R&S®HM525	4031.0508.02

Recommended extras		
Tripod	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



Field-strength sensitivity; bandwidth 1 Hz; S/N ratio 0 dB (measurement ranges 1 to 5 active)



Field-strength sensitivity in broadband mode