

R&S®AM524 Low-Noise Active Antenna System

100 Hz to 1 GHz

For measuring low-level signals in anechoic chambers



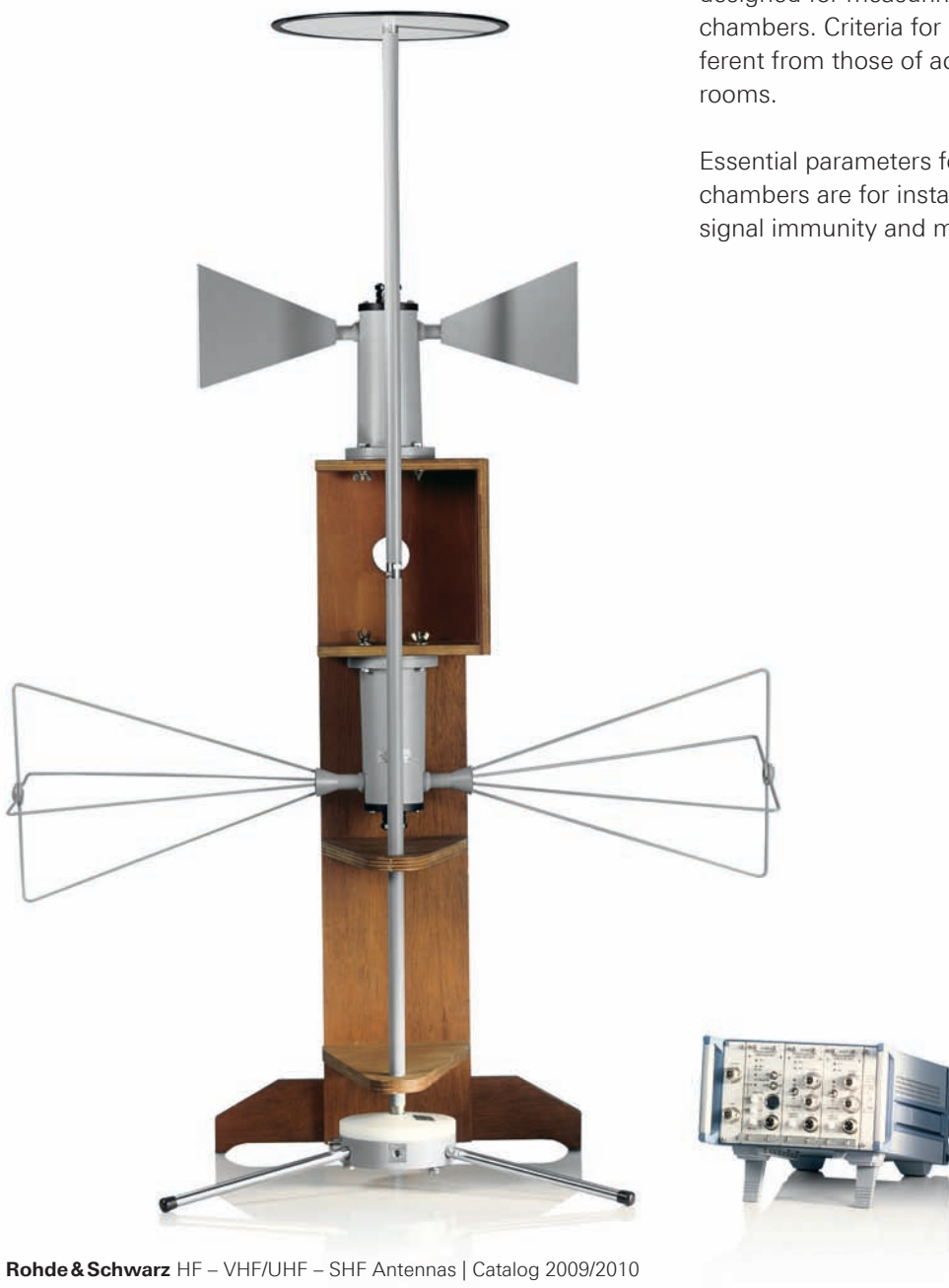
Features

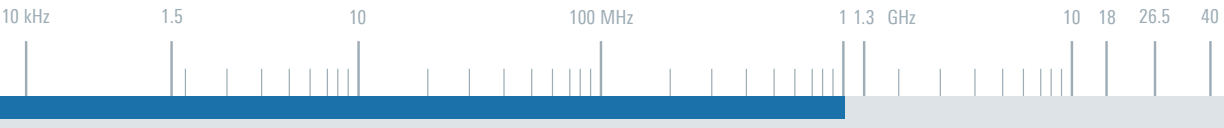
- ▀ Extremely high sensitivity
- ▀ Excellent large-signal characteristics
- ▀ Wide frequency range
- ▀ Especially suitable for TEMPEST measurements
- ▀ Individual calibration in line with ANSI C63.5

Brief description

The R&S®AM524 active antenna system has been designed for measuring low-level signals in anechoic chambers. Criteria for dimensioning such antennas are different from those of active antennas used outside shielded rooms.

Essential parameters for antennas used in anechoic chambers are for instance low dimensions, high large-signal immunity and maximum sensitivity.





Specifications

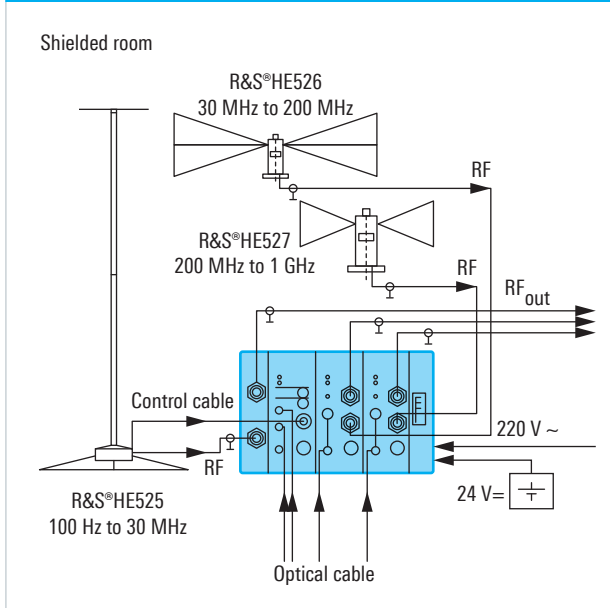
Frequency range	100 Hz to 1 GHz (in three subranges)
Input impedance	50 Ω
Antenna factor ¹⁾	
100 Hz to 30 MHz	0 dB
100 MHz	-10 dB
1 GHz	typ. 19 dB
Field-strength sensitivity (Δf = 1 Hz, S/N = 0 dB)	
100 Hz	typ. 0 dB(μV/m)
100 kHz	typ. -43 dB(μV/m)
30 MHz	typ. -51 dB(μV/m)
100 MHz	typ. -54 dB(μV/m)
1 GHz	typ. -37 dB(μV/m)
Power supply	100/120/220/230/240 V ± 10%, 47 Hz to 63 Hz

Connectors	N female
MTBF	>15000 h
Operating temperature range	-10°C to +55°C
Dimensions (width × height)	
R&S®HE525	approx. 0.3 m × 1.5 m (approx. 11.8 in × 59.1 in)
R&S®HE526	approx. 1 m × 0.3 m (approx. 39.4 in × 11.8 in)
R&S®HE527	approx. 0.5 m × 0.25 m (approx. 19.7 in × 9.9 in)
Weight	
R&S®HE525	approx. 5 kg (approx. 11.0 lb)
R&S®HE526	approx. 1.7 kg (approx. 3.8 lb)
R&S®HE527	approx. 1.6 kg (approx. 3.5 lb)

¹⁾ Without attenuator or amplifier.

Ordering information	Type	Order No.
Low-Noise Active Antenna System	R&S®AM524	4015.7001.02
Recommended extras		
Control Unit	R&S®GS525	4035.5004.02
Optical Cable Set	R&S®GS525K1	4035.5604.02

Overview of system components



Typical field-strength sensitivity

