

# R&S®AM524 LOW-NOISE ACTIVE ANTENNA SYSTEM

100 Hz to 1 GHz; optional 18 GHz

For measuring low-level signals in anechoic chambers



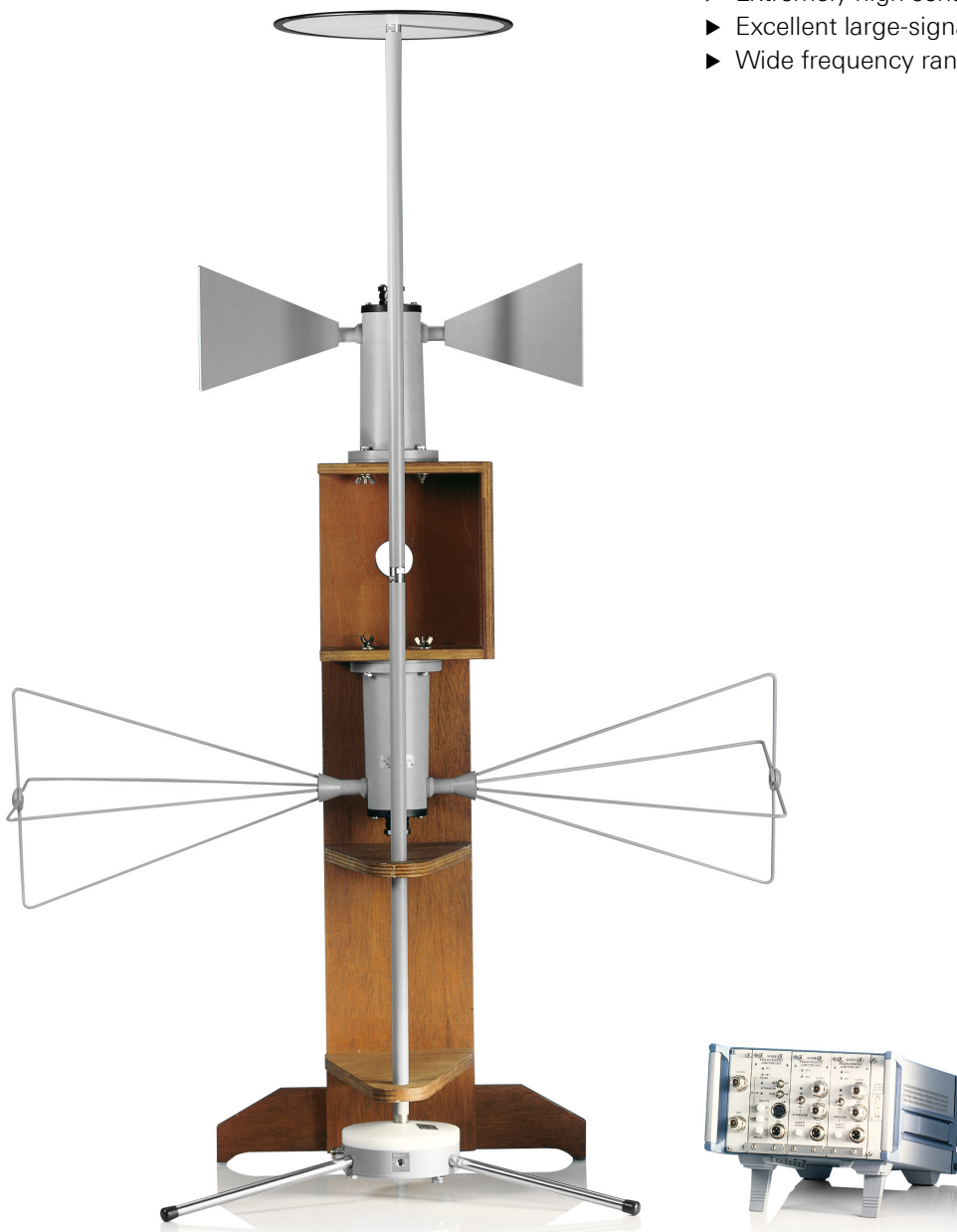
The R&S®AM524 low-noise active antenna system has been designed for measuring low-level signals in anechoic chambers. Criteria for dimensioning such antennas are different from those of active antennas used outside shielded rooms.

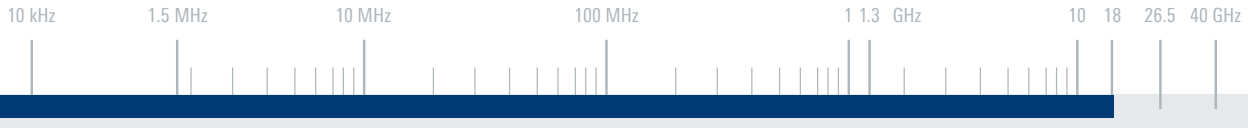
The R&S®AM524 features maximum sensitivity, small dimensions and the capacity to handle large signal emissions from the EUT.

Individual calibration in line with ANSI standards available.

## Key facts

- ▶ Extremely high sensitivity
- ▶ Excellent large-signal characteristics
- ▶ Wide frequency range





**Specifications**

Frequency range	100 Hz to 1 GHz (in three subranges)	
	850 MHz to 18 GHz <sup>1)</sup> (optional with R&S®HL050S7)	
Input impedance	50 Ω	
Antenna factor <sup>2)</sup>	100 Hz to 30 MHz	-2 dB (1/m) to 0 dB (1/m)
	100 MHz	-11 dB (1/m) to -3 dB (1/m)
	1 GHz	-6 dB (1/m) to +17 dB (1/m)
Field strength sensitivity ( $\Delta f = 1$ Hz, $S/N = 0$ dB)	100 Hz	0 dB( $\mu$ V/m) (typ.)
	100 kHz	-43 dB( $\mu$ V/m)
	30 MHz	-51 dB( $\mu$ V/m)
	100 MHz	-54 dB( $\mu$ V/m)
	1 GHz	-37 dB( $\mu$ V/m)
Power supply	AC	100/120/220/230/240 V $\pm$ 10%, 47 Hz to 63 Hz
	DC	22 V to 28 V, max. 0.7 A at 24 V
Connectors	N female	
MTBF	> 15000 h	
Operating temperature range	+5°C to +40°C	
Dimensions (W x H x D)	R&S®HE525	600 mm x 1500 mm x 600 mm (23.6 in x 59.1 in x 23.6 in) (nom.)
	R&S®HE526	1005 mm x 320 mm x 320 mm (39.6 in x 12.6 in x 12.6 in) (nom.)
	R&S®HE527, model .02	500 mm x 250 mm x 250 mm (19.7 in x 9.8 in x 9.8 in) (nom.)
Weight	R&S®HE525	approx. 5 kg (11.0 lb)
	R&S®HE526	approx. 1.7 kg (3.8 lb)
	R&S®HE527	approx. 1.6 kg (3.5 lb)

<sup>1)</sup> Limited to 18 GHz by the R&S®OSP open switch and control platform.

<sup>2)</sup> Without attenuator or amplifier.

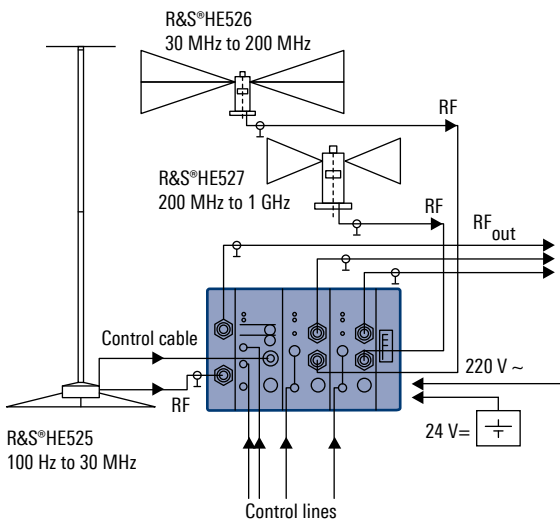
**Ordering information**

Ordering information	Type	Order No.
Low-noise active antenna system	R&S®AM524	4015.7001.02

**Recommended extras**

Open switch and control platform, without touchscreen	R&S®OSP-220	1528.3105.02
Open switch and control platform, with touchscreen	R&S®OSP-230	1528.3105.03
Module for R&S®OSP, for controlling R&S®AM524	R&S®OSP-BS524	4118.6007.02
Log-periodic directional antenna, with preamplifier, calibrated (up to 18 GHz)	R&S®HL050S7	4064.6040.03

**Overview of system components (shielded room)**



**Typical field strength sensitivity ( $S/N = 0$  dB;  $\Delta f = 1$  Hz)**

