R&S®AC005 OMNIDIRECTIONAL ANTENNA

500 MHz to 40 GHz

For wideband monitoring and measuring applications

The R&S®AC005 omnidirectional antenna covers the extremely wide frequency range from 0.5 GHz to 40 GHz in a two dipole stacked configuration. The lower antenna operates from 0.5 GHz to 18 GHz and the upper antenna covers the frequency range from 18 GHz to 40 GHz.

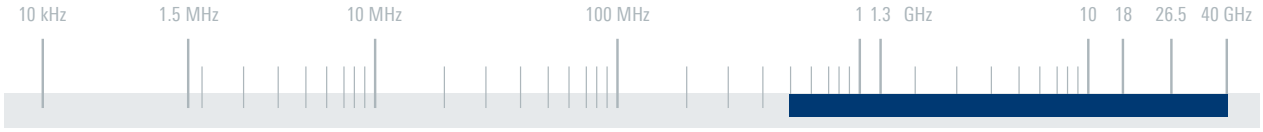
The R&S®AC005 is designed for slant polarization. Horizontal, vertical and circular polarized signals can be received simultaneously.

The key functions as a receiving antenna are wideband monitoring and measuring with good sensitivity, e.g. for coverage measurements and for interference hunting. As a transmitting antenna, the R&S®AC005 is designed to transmit low-power signals (e.g. to measure EMI immunity and to emit test signals).

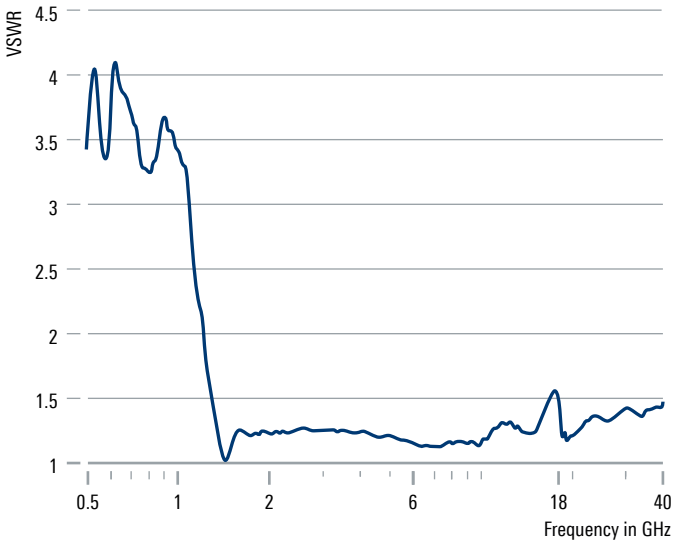
Due to its sturdy design, the R&S®AC005 can be used for naval applications as well.

Key facts

- Extremely wide frequency range
- High efficiency
- Compact dimensions
- Robust design – ideal for use on board vehicles



Specifications		
Frequency range		500 MHz to 40 GHz
Polarization		linear, slant
Input impedance		50 Ω
VSWR		see diagram
Gain	0.6 GHz to 18 GHz	0 dBi to 5 dBi (typ.)
	18 GHz to 40 GHz	0 dBi (typ.)
Uncircularity		< ±2 dB (typ.)
Maximum input power		14 W at +25 °C
RF connectors	0.5 GHz to 18 GHz	N female
	18 GHz to 40 GHz	K (2.92) female
Operating temperature range		–40 °C to +65 °C
Protection class		IPx6, waterproof
Maximum wind speed	without ice deposit	275 km/h
	with 30 mm radial ice deposit	180 km/h
Dimensions	Ø × H	approx. 400 mm × 410.5 mm (15.8 in × 16.2 in)
Weight		approx. 9 kg (19.8 lb)

Ordering information	Type	Order No.
Omnidirectional antenna	R&S®AC005	4113.3000.02
Recommended extra		
Outdoor antenna amplifier	R&S®OAA1840	3065.5506.02

Typical VSWR