

R&S®AC004R1/ R&S®AC004L1 OMNIDIRECTIONAL ANTENNAS

18 GHz to 26.5 GHz

Broadband omnidirectional antennas

Available for left-hand or right-hand circular polarization



The R&S®AC004R1 and R&S®AC004L1 omnidirectional antennas are designed for reception in the frequency range from 18 GHz to 26.5 GHz.

The circularly polarized antennas can also be used to receive horizontally and vertically polarized signals.

In addition to signal reception, the antennas are capable of radiating signals at medium power.

The mechanical design of the antennas ensures reliable operation even under harsh environmental conditions, e.g. in mobile applications.

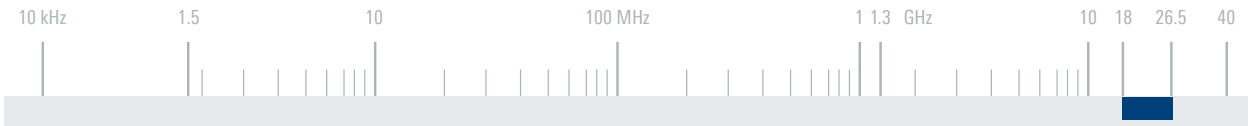
The antennas are delivered with a weather protection cover.

Key facts

- ▶ Omnidirectional reception
- ▶ Wide frequency range
- ▶ Suitable for use under harsh environmental conditions (e.g. in mobile applications)



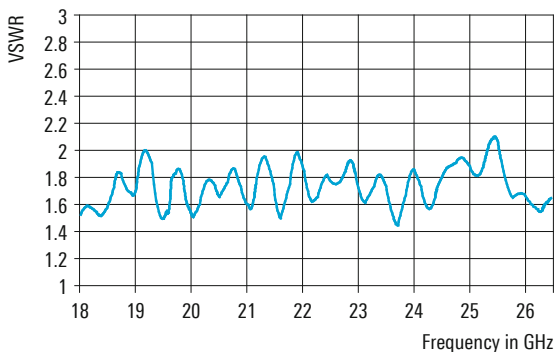
Antennas without weather protection cover.



Specifications		
Frequency range		18 GHz to 26.5 GHz
Polarization		right-hand circular (R&S®AC004R1) or left-hand circular (R&S®AC004L1)
Input impedance		50 Ω
VSWR		typ. < 2.5 (see diagram)
Gain		typ. 2 dBi
Connector		RPC2.92 (K) female
Max. input power		25 W (CW, +20°C ambient temperature)
Radiation pattern, azimuth plane		omnidirectional (see diagram), uncircularity max. ±3 dB
Radiation pattern, elevation plane		directional, half-power beamwidth typ. 20°
MTBF		> 100 000 h
Operating temperature range		-35°C to +65°C
Protection class		IP54
Max. wind speed	without ice deposit	180 km/h
Dimensions	Ø × H	approx. 150 mm × 134 mm (6 in × 5 in)
Weight		approx. 1.4 kg (3 lb)

Ordering information	Type	Order No.
Omnidirectional antenna		
For right-hand circular polarization	R&S®AC004R1	0749.3000.03
For left-hand circular polarization	R&S®AC004L1	4078.4000.02

Typical VSWR



Typical horizontal radiation pattern

