

R&S®HE500 ACTIVE RECEIVING ANTENNA

20 MHz to 3 GHz

Good reception results in a compact size



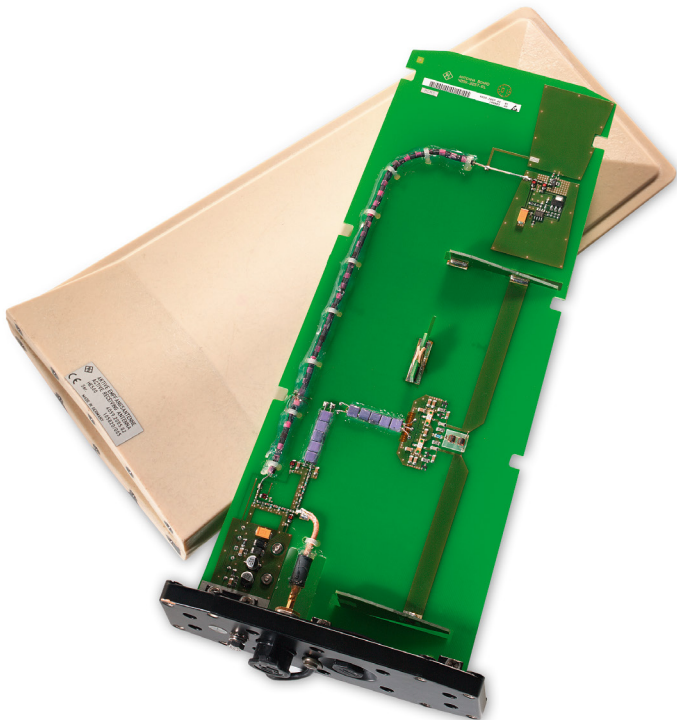
The R&S®HE500 active receiving antenna has been designed as a monitoring antenna for vertical polarization and omnidirectional reception in the frequency range from 20 MHz to 3 GHz.

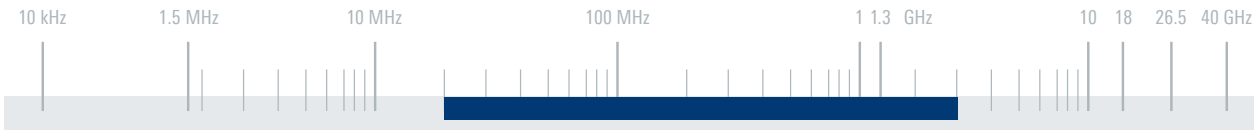
The antenna features a compact design and low weight, making it ideal for use in mobile systems and environments where space is at a premium.

A sturdy, composite radome protects the antenna and its electronics against the effects of weather and high wind speeds.

Key facts

- ▶ Extremely broadband
- ▶ Omnidirectional radiation pattern
- ▶ Low weight
- ▶ Compact size
- ▶ Weatherproof housing



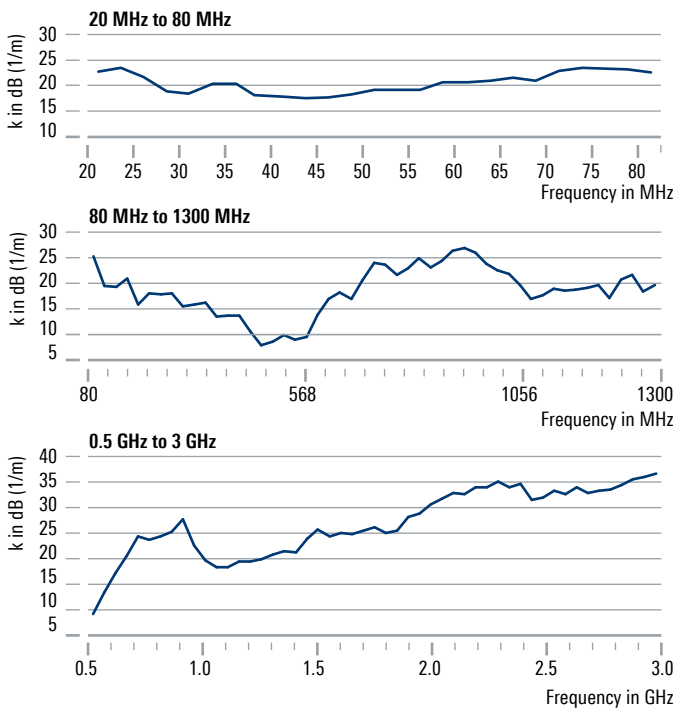


Specifications		
Frequency range		20 MHz to 3 GHz
Polarization		linear/vertical
Input impedance		50 Ω
VSWR		< 3 (typ.)
Horizontal radiation pattern		omnidirectional
Antenna factor		see diagram
Field strength sensitivity (S/N = 0 dB, Δf = 1 Hz)		see diagram
Destructive field strength		> 50 V/m (typ.)
IP2 (output)	20 MHz to 900 MHz	> 50 dBm (typ.)
	> 900 MHz to 3 GHz	> 30 dBm (typ.)
IP3 (output)		> 25 dBm (typ.)
Power supply		18 V to 32 V DC (max. 180 mA)
Connector		N female
MTBF		> 50000 h
Operating temperature range		-40°C to +65°C
Maximum wind speed	model .02	250 km/h
	model .14	600 km/h (only on narrow side)
Dimensions	W x H x L	approx. 65 mm x 365 mm x 170 mm (3 in x 14 in x 7 in)
Weight		approx. 1.2 kg (3 lb)

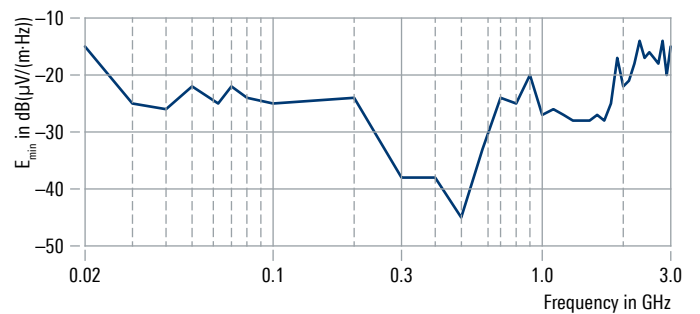
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Ordering information	Type	Order No.
Active receiving antenna	R&S®HE500	4059.2005.02
Active receiving antenna, for use on aircraft	R&S®HE500	4059.2005.14
Recommended extra		
Bias unit	R&S®IN600	4094.3004.xx

Typical antenna factor



Measured field strength sensitivity (for SNR = 0 dB) in the main beam direction referred to a 1 Hz bandwidth



Typical VSWR characteristic

