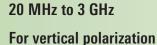
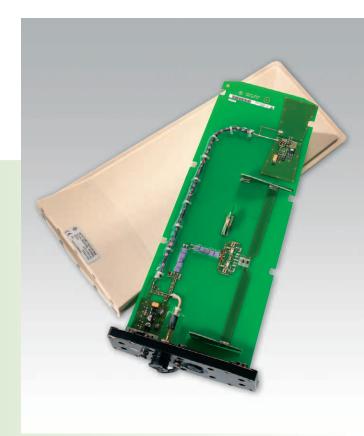
VHF/UHF Antennas

Active Receiving Antenna R&S®HE 500







Features

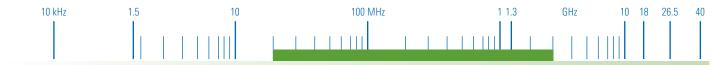
- Extremely broadband
- Omnidirectional radiation pattern
- Low weight
- Compact size
- ◆ Weatherproof housing

Brief description

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

The antenna is characterized by compact design and low weight. It is therefore ideal for use in mobile systems and environments where space is at a premium.

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



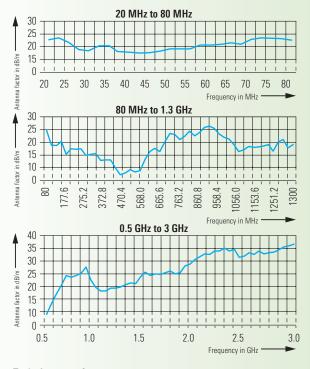
Specifications

| Frequency range | 20 MHz to 3 GHz |
|----------------------------|--------------------|
| Polarization | linear/vertical |
| Input impedance | 50 Ω |
| VSWR | typ. <3 |
| Horizontal radiation | |
| pattern | omnidirectional |
| Antenna factor | see diagrams below |
| Field-strength sensitivity | |
| 20 MHz to 1.3 GHz | typ. –23 dB(μV/m) |
| 1.3 GHz to 3 GHz | typ. –20 dB(μV/m) |
| Destructive field strength | |
| Up to 10 MHz | typ. >50 V/m |
| 10 MHz to 20 MHz | typ. >20 V/m |
| 20 MHz to 3 GHz | typ. >10 V/m |

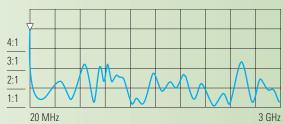
| IP2 | >30 dBm (typ. >50 dBm) | | |
|--------------------------------------|---|--|--|
| IP3 | typ. >25 dBm | | |
| Power supply | 18 V to 32 V DC (max. 180 mA) | | |
| Connector | N female | | |
| MTBF | >50 000 h | | |
| Operating | | | |
| temperature range | −40 °C to +65 °C | | |
| Max. wind speed | | | |
| Narrow side | 600 km/h (without ice deposit) | | |
| Broad side | 250 km/h (without ice deposit) | | |
| Protection class | IP 55 to DIN 40050 | | |
| Dimensions (L \times W \times H) | approx. 170 mm \times 65 mm \times 365 mm | | |
| Weight | approx. 1.2 kg | | |

Ordering information

| Active | | Recommended extras | | | |
|-------------------|-----------|--------------------|-----------|------------|--------------|
| Receiving Antenna | R&S®HE500 | 4059.2005.02 | Bias Unit | R&S®IN 500 | 4062.0880.02 |



Typical antenna factor



Typical VSWR characteristic