R&S®HF907 DOUBLE-RIDGED WAVEGUIDE HORN ANTENNA

800 MHz to 18 GHz

Broadband directional antenna, ideal for EMC measurements



The linearly polarized R&S®HF907 double-ridged waveguide horn antenna is a broadband, compact transmitting and receiving antenna for the frequency range from 800 MHz to 18 GHz.

High gain and low VSWR permit the measurement of weak signals and the generation of high field strengths without any significant return loss.

The R&S°HF907 sets itself apart from conventional broadband horn antennas in that its radiation pattern contains only a single main lobe over the entire frequency range; there are no appreciable side lobes.

The antenna is made of aluminum to keep its weight low.

Key facts

- ▶ Wide frequency range
- ▶ High and constant gain
- ▶ Low VSWR
- ► Radiation pattern contains only one main lobe over the entire frequency range
- ► Input power up to 300 W (CW)/500 W (PEP)
- ▶ Ideal for use in EMC laboratories
- ▶ Compact size
- ► Individual calibrations in line with ANSI C63.5, CISPR 16-1-6 and SAE ARP958
- ► Accredited calibration available on request





| Specifications | | |
|--|----------------|---|
| Frequency range | | 800 MHz to 18 GHz |
| Polarization | | linear |
| Cross-polarization | | < -25 dB; < -30 dB (typ.) |
| Nominal impedance | | 50 Ω |
| VSWR | f < 1.5 GHz | < 3.0 |
| | f ≥ 1.5 GHz | < 2.0 |
| Maximum input power (+40 °C ambient temperature) | 0.8 to 4.5 GHz | 300 W (CW) |
| | at 10 GHz | 200 W (CW) |
| | at 18 GHz | 150 W (CW) |
| Gain | | 5 dBi to 14 dBi (typ.) |
| Connector | | N female |
| Operating temperature range | | −10°C to +50°C |
| MTBF | | > 100 000 h |
| Dimensions | W×H×L | approx. $305 \text{ mm} \times 226 \text{ mm} \times 280 \text{ mm}$ (12 in \times 9 in \times 11 in) |
| Weight | | approx. 1.9 kg (4 lb) |

| Ordering information | Туре | Order No. | | |
|--------------------------------------|-----------|--------------|--|--|
| Double-ridged waveguide horn antenna | R&S®HF907 | 4070.7000.02 | | |
| Recommended extra | | | | |
| Wooden tripod | R&S®HZ-1 | 0837.2310.02 | | |

Gain in dBi

Typical gain



Typical VSWR

