

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.

Each R&S®HF907 is calibrated individually in line with ANSI C63.5 and SAE ARP958, making the antennas ideal for EMC measurements.

An accredited calibration of the free-space antenna factors is optionally available.

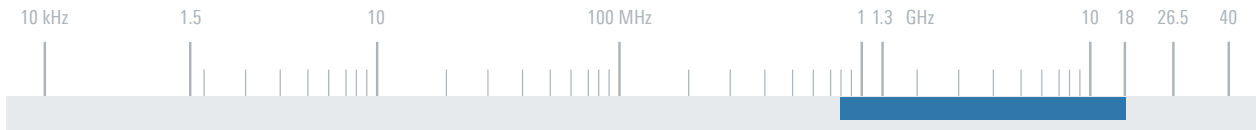
The R&S®HF907 sets itself apart from conventional broadband horn antennas in that its radiation pattern contains only a single main lobe over the entire frequency range; there are no appreciable side lobes.

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
- Each antenna is calibrated individually in line with ANSI C63.5 and SAE ARP958





Specifications

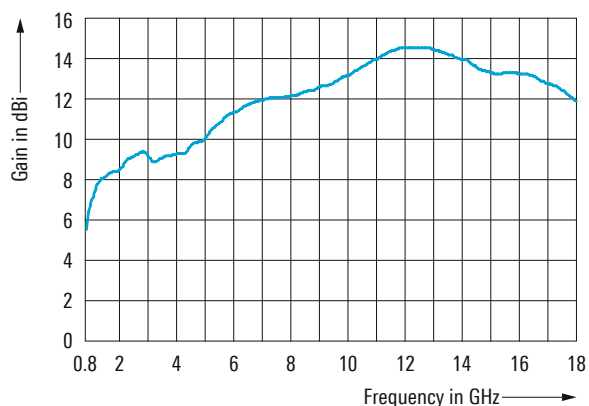
Frequency range	800 MHz to 18 GHz
Polarization	linear
Polarization decoupling	> 25 dB; typ. > 30 dB
Input impedance	50 Ω
VSWR	≤ 3.0 (f < 1.5 GHz), < 2.0 (f ≥ 1.5 GHz)
Max. input power ¹⁾	
0.8 to 4.5 GHz	300 W CW
At 10 GHz	200 W CW
At 18 GHz	150 W CW

Gain	5 dBi to 14 dBi (typ.)
Connector	N female
Operating temperature range	-10°C to +50°C
MTBF	> 100000 h
Dimensions (W × H × L)	approx. 280 mm × 226 mm × 305 mm (11 in × 9 in × 12 in)
Weight	approx. 1.9 kg (4 lb)

¹⁾ At ambient temperature +40°C.

Ordering information	Type	Order No.
Double-Ridged Waveguide Horn Antenna	R&S®HF907	4070.7000.02
Accredited Antenna Calibration (free-space antenna factors)	R&S®HF907-DKD	4060.6398.02
Recommended extras		
Wooden Tripod	R&S®HZ-1	0837.2310.02

Typical gain



Typical VSWR

