

R&S®HE055

Active Omnidirectional Receiving Antenna

1.5 MHz to 600 MHz

With excellent large-signal characteristics and high sensitivity



Features

- Active omnidirectional receiving antenna
- Extremely wide frequency range
- Space- and cost-optimized monitoring by using only one antenna in the system
- Excellent immunity to high signal levels
- High sensitivity due to very low displayed average noise level
- Rugged mechanical design (specially designed for mobile use and rough environmental requirements)

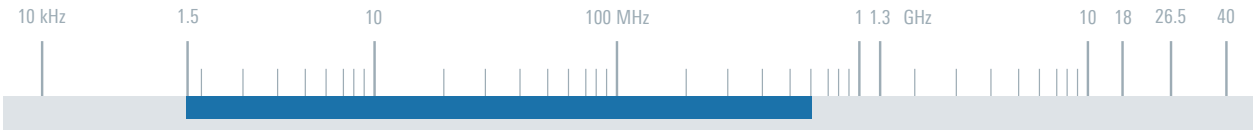
Brief description

The R&S®HE055 active omnidirectional receiving antenna allows the reception of the extremely wide frequency range from 1.5 MHz to 600 MHz. Applications in this frequency range thus require only one antenna.

Due to its rugged mechanical design and small dimensions, the antenna is suitable both for stationary and various mobile applications.

The excellent large-signal characteristics of the antenna circuitry ensure operation in areas of high signal levels.

The low displayed average noise of the antenna circuitry allows sensitive reception of very weak signal levels.

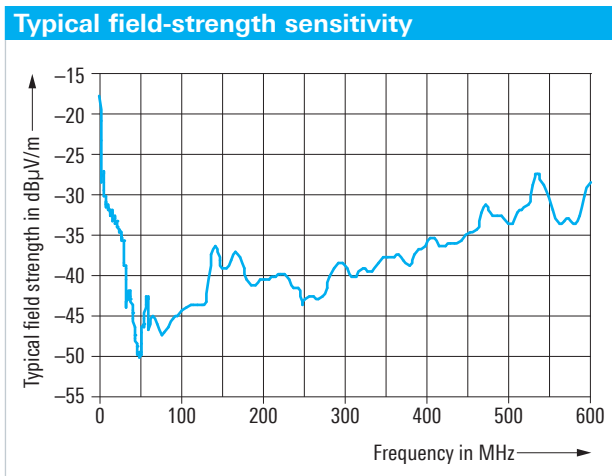
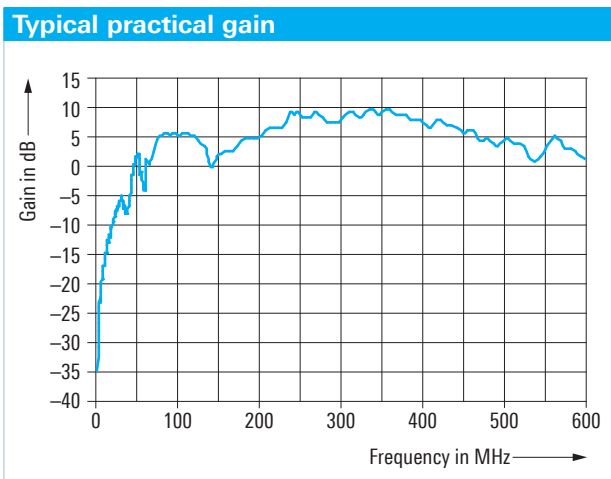


Specifications	
Frequency range	1.5 MHz to 600 MHz
Polarization	vertical
Input impedance	50 Ω
VSWR	
1.5 MHz to 30 MHz	<1.5
30 MHz to 600 MHz	<3.0
Transducer factor (for antenna mounted to conductive plane)	7 dB/m to 30 dB/m (typ.)
Intercept point (rel. to output)	
2nd order	≥70 dBm ¹⁾ ≥65 dBm ²⁾
3rd order	≥40 dBm ³⁾ ≥40 dBm ⁴⁾

1 dB compression point	≥10 dBm output power into 50 Ω
Power supply	21 V to 32 V DC (max. 500 mA)
Connector	N female
MTBF	>250 000 h
Operating temperature range	-40°C to +85°C
Max. wind speed	200 km/h
Dimensions	
Length	approx. 1406 mm (approx. 55.4 in)
Diameter	approx. 153 mm (approx. 6 in)
Weight	approx. 3.5 kg (approx. 7.7 lb)

- 1) f_{test} in MHz: 10 - 8 = 2.
- 2) f_{test} in MHz: 140 - 95 = 45.
- 3) f_{test} in MHz: 2 × 10 - 8 = 12.
- 4) f_{test} in MHz: 2 × 95 - 140 = 50.

Ordering information	Type	Order No.
Active Omnidirectional Receiving Antenna	R&S®HE055	4065.1120.02
Recommended extras		
Power Supply Unit	R&S®IN115	4004.1707.02



At antenna output (measurement bandwidth $\Delta f = 1$ Hz; S/N = 0 dB).