R&S®HE600 ACTIVE OMNIDIRECTIONAL RECEIVING ANTENNA

20 MHz to 8 GHz

Sensitive monitoring in stationary and mobile installations





The R&S°HE600 active omnidirectional receiving antenna is designed as a monitoring antenna for vertical polarization in the frequency range from 20 MHz to 8 GHz.

The integrated preamplifier provides good reception results in a compact size.

The dipole concept delivers superior radiation characteristics even without the presence of a ground plane.

A low-attenuation, weather-resistant radome makes the antenna suitable for operation under harsh environmental conditions.

Key facts

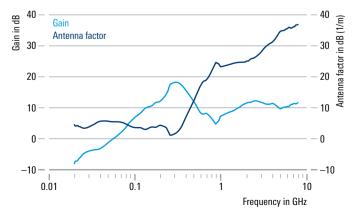
- ► Extremely wide frequency range
- ► Vertical polarization
- ▶ High sensitivity
- ▶ Low weight
- ▶ Compact size
- Suitable for operation under harsh environmental conditions



Specifications		
Frequency range		20 MHz to 8 GHz
Polarization		linear/vertical
RF connector		N female, 50 Ω
VSWR		< 2 (typ.)
Gain and antenna factor		see diagram
Field strength sensitivity		see diagram
Circularity of azimuth pattern		< 3 dB (typ.)
IP2 (output)	f < 1.1 GHz	> 40 dBm; > 47 dBm (typ.)
	f ≥ 1.1 GHz	> 26 dBm; > 32 dBm (typ.)
	> 3 GHz	> 32 dBm (typ.)
P3 (output)	f < 1.1 GHz	> 20 dBm; > 30 dBm (typ.)
	f ≥ 1.1 GHz	> 20 dBm; > 23 dBm (typ.)
	> 3 GHz	> 20 dBm (typ.)
Destructive field strength		> 50 V/m
Power supply (via coaxial cable)		15 V to 28 V DC (24 V (typ.), max. 180 mA)
Operating temperature range		-40°C to +65°C
Storage temperature range		-40°C to +85°C
Protection class		IP55
Maximum wind speed	without ice deposit	275 km/h
	with 30 mm ice deposit	200 km/h
MTBF		> 100 000 h
Dimensions	Ø×H	approx. 135 mm \times 550 mm (5 in \times 22 in)
Weight		approx. 2 kg (4 lb)

Ordering information	Туре	Order No.
Active omnidirectional receiving antenna	R&S®HE600	
Color: squirrel gray (RAL 7000)		4094.9002.02
Color: bronze green (RAL 6031)		4094.9002.03
Color: light ivory (RAL 1015)		4094.9002.04
Recommended extras		
Bias unit	R&S°IN600	4094.3004.xx
Mast and tripod adapter	R&S®KM011Z9	4095.0750.02
Wooden tripod	R&S®HZ-1	0837.2310.02

Typical gain and antenna factor



Typical field strength sensitivity at antenna output $(\Delta f = 1 \text{ Hz}, \text{S/N} = 0 \text{ dB})$

