

R&S®HFH2-Z6E Active Rod Antenna

8.3 kHz to 30 MHz

Broadband active rod antenna for measuring electrical field components in EMI test setups

New



The R&S®HFH2-Z6E active rod antenna measures the electrical field strength in the LF, MF and HF frequency range. It can be used for EMI measurements in line with various standards (i.e. CISPR, MIL, FCC, ANSI, ETSI).

Each antenna is individually calibrated.

It is characterized by an almost frequency-independent antenna factor and very high sensitivity.

In strong field environments, an attenuator can be activated to reduce distortion. An integrated RF detector with a threshold circuit reports overload of the antenna.

The antenna is supplied via a coaxial cable using the optional R&S®IN600 bias unit.

Key facts

- Wide frequency range
- High sensitivity
- Wide dynamic range
- Compact design
- Integrated overload warning
- R&S®IN600 bias unit for power supply via coaxial cable available
- No batteries needed
- Individual calibration certificate supplied with antenna
- Virtually constant antenna factor



Specifications

Frequency range	8.3 kHz to 30 MHz
Polarization	linear/vertical
Nominal impedance	50 Ω
VSWR	< 1.6
RF connector	N female
Antenna factor in normal mode	
8.3 kHz to 20 kHz	10 dB(1/m) ± 2 dB
> 20 kHz to 30 MHz	10 dB(1/m) ± 1.5 dB
Antenna factor in attenuation mode	
8.3 kHz to 20 kHz	20 dB(1/m) ± 2 dB
> 20 kHz to 30 MHz	20 dB(1/m) ± 1.5 dB
Lower limit field strength in normal mode	
8.3 kHz to 1 MHz	see diagram
> 1 MHz to 30 MHz	< -40 dBμV/m (1 Hz) (meas.)

Upper limit field strength	
Normal mode	typ. 125 dBμV/m
Attenuation mode	typ. 135 dBμV/m
Destructive field strength	
8.3 kHz to 30 MHz	> 50 V/m
> 30 MHz to 2 GHz	> 10 V/m
MTBF	> 250 000 h
Power supply (via coaxial cable)	+24 V DC –3 V/+1 V (max. 150 mA)
Operating temperature range	+5°C to +40°C
Dimensions	
Base (W × L × H)	approx. 600 mm × 600 mm × 100 mm (24 in × 24 in × 4 in)
Rod height	approx. 1040 mm (41 in)
Weight	approx. 6.5 kg (14 lb)

Ordering information

Type	Order No.
Active Rod Antenna	4110.1006.02
Recommended extras	
Bias Unit	R&S®IN600
Wooden Tripod	R&S®HZ-1

Lower limit field strength level (for SNR = 1) in normal mode (meas.)

