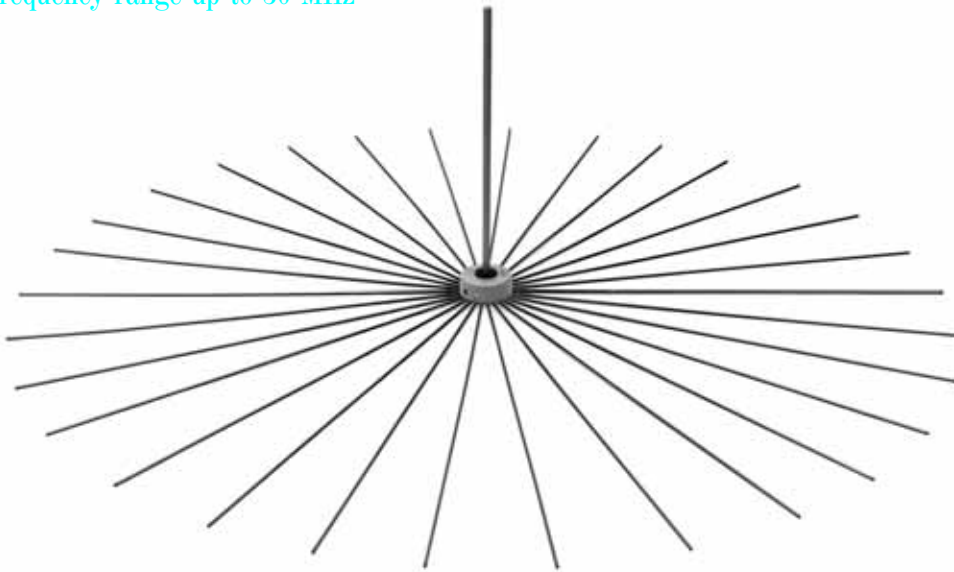


Frequency range up to 30 MHz



HFH2-Z1



HFH2-Z2 on Tripod HFU-Z

Rod Antenna HFH2-Z1

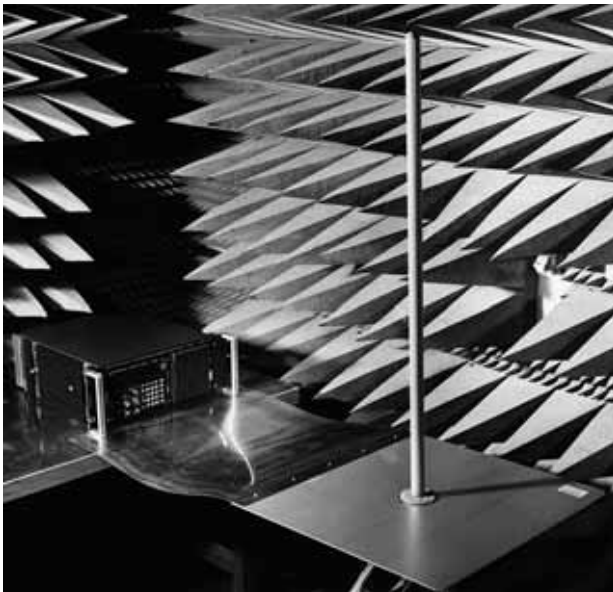
Broadband active rod antenna for use as a general-purpose receiving antenna and for measuring the electrical field-strength components, preferably in open-area measurements.

Loop Antenna HFH2-Z2

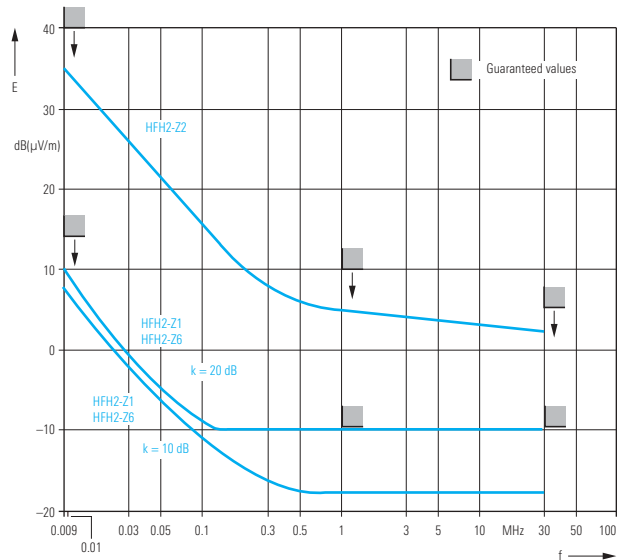
Broadband active loop antenna for measuring the magnetic field-strength components.

Rod Antenna HFH2-Z6

Broadband active rod antenna for measuring the electrical component of radiated EMI in test setups to MIL-STD-461/462 and similar MIL standards.



HFH2-Z6



Smallest detectable field-strength level (for S/N=1) of HFH2-Z1, -Z2 and -Z6 (frequency-dependent, average indication, IF bandwidth 200 Hz); with quasi-peak indication the level in the range 9 kHz to 149.9 kHz (band A) increases by approx. 3 dB, in the range 150 kHz to 30 MHz (band B) by approx. 23 dB.

Specifications

| | Rod Antenna HFH2-Z1 | Loop Antenna HFH2-Z2 | Rod Antenna HFH2-Z6 |
|--------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------|
| Frequency range | 9 kHz to 30 MHz | 9 kHz to 30 MHz | 9 kHz to 30 MHz |
| Transducer factor ¹⁾ k (referred to 1/m) Accuracy | 10/20 dB, selectable 1 dB | 20 dB (E field) ²⁾ 1 dB | 10/20 dB, selectable 1 dB |
| Measurement range (IF bandwidth 200 Hz, AV ind.) Lower limit, frequency-dependent (see also diagram on page 10) | +15 dB(μV/m) to -10 dB(μV/m) | 9 kHz dB(μV/m) to 1 MHz: +40 dB(μV/m) to +10 dB(μV/m) 1 MHz to 30 MHz: +10 dB(μV/m) to +5 dB(μV/m) | +15 dB(μV/m) to -18 dB(μV/m) |
| Upper limit at k = 20 dB | 140 dB(μV/m) | 140 dB(μV/m) | 140 dB(μV/m) |
| Upper limit at k = 10 dB | 130 dB(μV/m) | – | 130 dB(μV/m) |
| Source impedance | 50 Ω | 50 Ω | 50 Ω |
| Max. output voltage into 50 Ω | 1 V | 1 V | 1 V |

General Data

| | | | |
|--------------------------------------------|-------------------------------------------------|-------------------------|---------------------------------------------|
| Nominal temperature range | -10°C to +55°C | -10°C to +55°C | -10°C to +55°C |
| Storage temperature range | -25°C to +70°C | -25°C to +70°C | -25°C to +70°C |
| Connectors | | | |
| RF | BNC female | | |
| Supply and coding (antenna factor) | 12-contact Tuchel female | | |
| Length of connecting cable | 10 m | | |
| Current drain (±10 V, dep. on drive level) | <40 mA | <40 mA | <45 mA |
| Dimensions (see also drawing below) | ground net dia: 2510 mm, rod height: 1092 mm | loop dia: 590 mm | base: 60 mm x 60 mm, rod height: 1000 mm |
| Weight without cable | 8 kg (in transit case) | 12 kg (in transit case) | 5 kg |

¹⁾ The transducer factor (= log of antenna factor) is automatically considered in the display of Rohde & Schwarz test receivers and spectrum analyzers.

²⁾ 20 dB (1/m) applies to the far field; in the near field the transducer factor $k_n = -31.5 \text{ dB}(1/\Omega \times \text{m})$ is used for the magnetic field strength.

Ordering information

| | | | |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|
| Order No. | 0335.3215.52 | 0335.4711.52 | 0837.1866.54 |
| Accessories supplied | Coaxial cable (10 m) (0335.3609.00) Supply and coding cable (10 m) (0335.3596.00) 12-contact Tuchel female (0018.5079.00) | | |
| Recommended extras | Power Supply HZ-9 (page 12) Wooden Tripod HZ-1 (page 16) (only for HFH 2-Z6) Tripod HFU-Z (page 16) (only for HFH 2-Z2) For shielded rooms see ¹⁾ (only for HFH 2-Z2) | | |

¹⁾ For use in shielded rooms: Feeder Cable HZ-3 or HZ-4 (page 12) and Coaxial Cable HZ-5, 0816.0819.02 (3 m) or HZ-6, 0816.0860.02 (10 m).

Antenna dimensions (in mm)

