

R&S®HX002H1

150 W HF Dipole

1.5 MHz to 30 MHz

With integrated antenna tuning unit for stationary applications



The R&S®HX002H1 150 W HF dipole is suitable for setting up radio links over any distance. In particular, the optimized omnidirectional coverage ensures high transmission reliability over short and medium distances.

The R&S®HX002H1 can be directly connected to R&S®M3SR Series4100 HF transceivers by means of the R&S®GK4102 fiber-optic control cable.

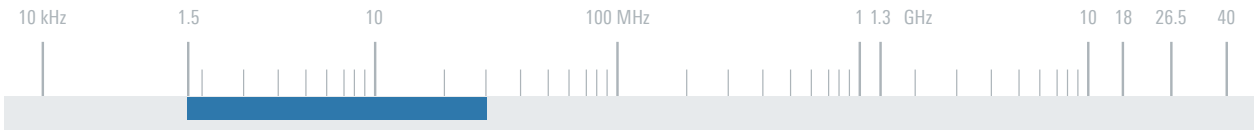
The antenna enables silent tuning over the entire frequency range from 1.5 MHz to 30 MHz. The integrated tuning unit must first learn the correct tuning settings for the antenna in a user-defined frequency range. The antenna then achieves tuning times of < 5 ms.

Special attention was paid to lightning protection. The integrated antenna tuning unit is protected against lightning strikes and was tested with 10 kV/10 kA discharges.

Key facts

- Omnidirectional coverage with high-angle radiation (NVIS)
- No skip zone
- Integrated antenna tuning unit for support of fast frequency hopping in line with R&S®SECOM-H
- Silent tuning
- Compatible with R&S®M3SR Series4100 HF transceivers
- Setup close to neighboring antennas possible





Specifications	
Frequency range	1.5 MHz to 30 MHz
Polarization	
Mainly vertical	1.5 MHz to 2 MHz
Mainly horizontal	2 MHz to 30 MHz
Input impedance	50 Ω
VSWR	< 1.5; typ. < 1.3
Max. input power	100 W CW/150 W PEP
Tuning time	
Initial tuning	< 4 s; typ. 1.5 s
Repeated tuning	typ. < 0.2 s
Silent tuning	< 5 ms

Tuning power	30 W ± 1 dB
Connector	N female
Operating temperature range	-30°C to +55°C ¹⁾
Protection class	IP66
Max. wind speed (survival)	
Without ice deposit	250 km/h
With 20 mm radial ice deposit	130 km/h
Dimensions (W × L)	approx. 4.4 m × 10.7 m (14 ft × 35 ft)
Weight	approx. 43 kg (95 lb)

¹⁾ Partial power reduction at > +35°C.

Ordering information	Type	Order No.
150 W HF Dipole	R&S®HX002H1	6120.7000.02
Recommended extra		
Fiber-Optic Control Cable	R&S®GK4102	
10 m		6120.5707.10
25 m		6120.5707.25
50 m		6120.5707.50
Tiltable Mast, length: 5 m, for roof mounting	R&S®KM002A1	4035.7359.02
Lattice Mast, length: 10 m	R&S®KM451B1	4028.3351.02
Lattice Mast, length: 15 m	R&S®KM451B2	4028.3400.02
Mast Adapter for 10 m or 15 m mast	R&S®KM451Z4	4032.2904.02
Mast Adapter on R&S®KM451Z4	R&S®KM451Z5	4039.8308.03

