

R&S®HX002H2

150 W HF DIPOLE

1.5 MHz to 30 MHz

With integrated antenna tuning unit optimized for shipboard applications



The R&S®HX002H2 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®HX002H2 can be directly connected to R&S®M3SR Series4100 HF transceivers by means of the R&S®GK4102 fiber-optic control cable.

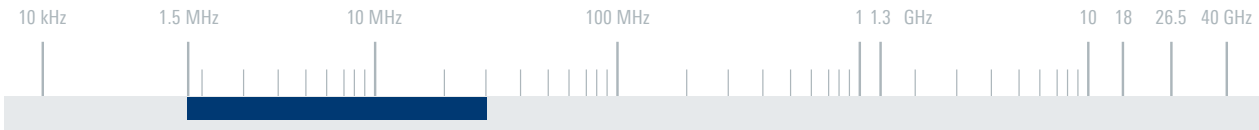
The antenna enables silent tuning over the entire frequency range from 1.5 MHz to 30 MHz. The integrated tuning unit must first learn the correct tuning settings for the antenna in a user-defined frequency range. The antenna then achieves tuning times of < 5 ms.

Special attention was paid to lightning protection. The integrated antenna tuning unit is protected against direct 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
- ▶ Optimized for use on ships



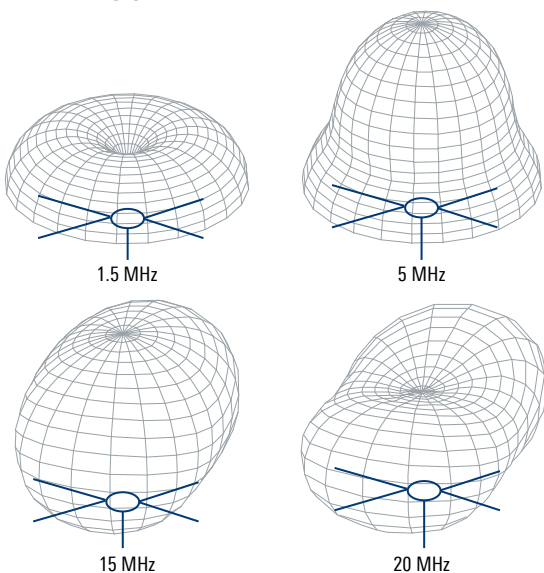


Specifications		
Frequency range		1.5 MHz to 30 MHz
Polarization	mainly vertical	1.5 MHz to 2 MHz
	mainly horizontal	2 MHz to 30 MHz
Input impedance		50 Ω
VSWR		< 1.5; < 1.3 (typ.)
Maximum input power		100 W (CW)/150 W (PEP)
Tuning time	initial tuning	< 4 s; 1.5 s (typ.)
	repeated tuning	< 0.2 s (typ.)
	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
Maximum wind speed (survival)	without ice deposit	275 km/h
	with 20 mm radial ice deposit	140 km/h
Dimensions	W × L	approx. 2.2 m × 5.2 m (7 ft × 17 ft)
Weight		approx. 32 kg (71 lb)

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

Ordering information	Type	Order No.
150 W HF dipole	R&S®HX002H2	6120.8006.02
Recommended extra		
Fiber-optic control cable	R&S®GK4102	
10 m		6120.5707.10
25 m		6120.5707.25
50 m		6120.5707.50

Typical three-dimensional radiation patterns above perfectly conducting ground



Typical gain on a 5 m mast above perfectly conducting ground

