

R&S®HX002A1

150 W HF Dipole

1.5 MHz to 30 MHz

With integrated antenna tuning unit
for all distance ranges



Features

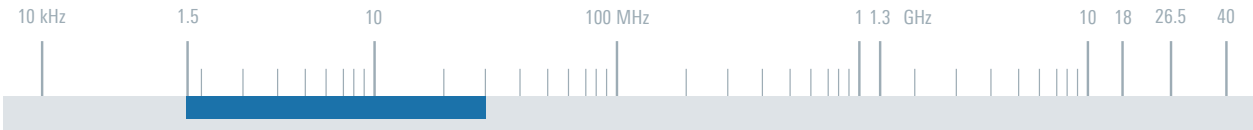
- Omnidirectional coverage with high-angle radiation (NVIS)
- No skip zone
- Automatic adaptive operation
- Silent tuning
- No control line required
- Can be set up close to neighboring antennas

Brief description

The R&S®HX002A1 150 W HF dipole is highly suitable for setting up radio links over any distance range. The antenna design ensures high transmission reliability over short and medium distances. The antenna can easily be integrated in existing systems since no control lines are required. All control signals and the power for the ATU are fed via the coaxial cable. The R&S®HX002A1 HF dipole can be directly connected to the R&S®XK2100 HF transceiver. For operation with other transmitters, the R&S®GX002A1 junction unit is available to provide power supply and antenna control.

The automatic adaptive behavior of the integrated antenna tuning unit allows antennas to be set up close to neighboring antenna systems and on difficult terrain (e.g. built-on roofs).





Specifications	
Frequency range	1.5 MHz to 30 MHz
Polarization	linear/horizontal
Input impedance	50 Ω
VSWR	<1.5 (typ. <1.3)
Max. input power	100 W CW/150 W PEP
Tuning time	
Without retuning	typ. 200 ms
Initial tuning	≤6 s (typ. 3 s)
Silent tuning ¹⁾	<30 ms
Tuning power	
With Rohde & Schwarz transceivers	30 W to 100 W
With R&S®GX002A1	50 W to 100 W
Gain (5 m above perfectly conducting ground)	-12 dBi to 8 dBi (typ.)

¹⁾ Supported by Rohde & Schwarz transceivers only.

Power supply (via R&S®GX002A1)	
AC supply	100/120/230 V AC ±10%, 47 Hz to 63 Hz (100 VA)
Battery	22 V to 32 V DC (typ. 2.5 A at 24 V DC)
Connector	N female
MTBF	>8000 h
Operating temperature range	-25 °C to +55 °C
Max. wind speed (survival)	
Without ice deposit	250 km/h
With 20 mm radial ice deposit	130 km/h
Dimensions	
Length	approx. 10.7 m (approx. 421.3 in)
Width	approx. 4.4 m (approx. 173.2 in)
Height of ATU	approx. 0.42 m (approx. 16.5 in)
Weight	approx. 38 kg (approx. 83.8 lb)

Ordering information	Type	Order No.
150 W HF Dipole	R&S®HX002A1	4031.8009.02
Recommended extras		
Junction Unit	R&S®GX002A1	4031.9005.02
Cable Set for R&S®XK852 and R&S®GX002A1	R&S®GX002K1	4031.8909.03
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	4039.8308.02

