R&S®HX002A1 150 W HF Dipole

1.5 MHz to 30 MHz

With integrated antenna tuning unit for all distances

The R&S®HX002A1 150 W HF dipole is highly suitable for setting up radio links over any distances. The antenna design ensures high transmission reliability over short and medium distances. The antenna can easily be integrated into existing systems since no control lines are required. All control signals and 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.

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).

Key facts

- Omnidirectional coverage with high-angle radiation (NVIS)
- No skip zone
- Automatic adaptive operation
- Silent tuning
- No control line required
- I Setup close to neighboring antennas possible





Specifications	
Frequency range	1.5 MHz to 30 MHz
Polarization	linear/horizontal
Input impedance	50 W
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	< 30 ms
Tuning power	30 W to 100 W
Gain (5 m above perfectly conducting ground)	-12 dBi to +8 dBi (typ.)

Control and power supply	via R&S®XK2100	
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 (421.3 in)	
Width	approx. 4.4 m (173.2 in)	
Height of ATU	approx. 0.42 m (16.5 in)	
Weight	approx. 38 kg (83.8 lb)	

Ordering information	Туре	Order No.
150 W HF Dipole	R&S®HX002A1	4031.8009.02
Recommended extras		
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



