R&S®HX002 1 kW HF Dipole

2 MHz to 30 MHz

With integrated antenna tuning unit for all distances



The R&S®HX002 1 kW HF dipole ensures optimum coverage of all distances and can be used for transmission and reception. The antenna can be directly connected to the R&S®XK2500 and R&S®XK2900 HF transceivers (power supply and control signals via transceiver control cable).

The fully automatic ATU integrated in the antenna takes into account the ambient conditions to ensure optimum matching to the transceiver. This allows antennas to be set up close to neighboring antenna systems and on difficult terrain (e.g. built-on roofs). The R&S®HX002F option extends the frequency range, reducing the lower frequency limit from 2 MHz to 1.6 MHz.

Key facts

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



HF Antennas R&S®HX002 1 kW HF Dipole

10 kHz 1.	.5	10	100 MHz	1 1.3 GHz	10 18 26	5 40

Specifications			
Frequency range	2 MHz to 30 MHz		
With frequency extension	1.6 MHz to 30 MHz		
Polarization	linear/horizontal		
Input impedance	50 Ω		
VSWR	< 1.5 (typ. < 1.1)		
Max. input power	1.15 kW CW/1.15 kW PEP		
Tuning time			
Without retuning	70 ms to 500 ms		
With retuning	typ. 2 s		
Initial tuning	typ. < 15 s		
Silent tuning	< 60 ms (typ. 56 ms)		
Tuning power	50 W to 300 W		
Gain (15 m above perfectly conducting ground)	–3 dBi to +8 dBi (typ.)		

Power supply	21 V to 32 V DC (max. 6 A)				
Average	28 V DC (2.5 A)				
Power consumption	max. 165 VA				
RF connector	N female				
Control connector	26-contact, round, male				
MTBF	> 6500 h				
Operating temperature range	-30°C to +55°C				
Max. wind speed					
Without ice deposit	188 km/h				
With 30 mm radial ice deposit	130 km/h				
Dimensions					
Length	approx. 10.3 m (405.5 in)				
Width	approx. 3.6 m (141.7 in)				
Height of ATU	approx. 1.10 m (43.3 in)				
Weight	approx. 103 kg (227.1 lb)				

Ordering information	Туре	Order No.			
1 kW HF Dipole (with ATU)	R&S®HX002	0682.3010.24			
Recommended extras					
Frequency Range Extension, 1.6 MHz to 2 MHz	R&S [®] HX002F	4017.9053.02			
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			



