

# R&S®HL451 Log-Periodic HF Antenna

2 MHz to 30 MHz

Transmission and reception of horizontally polarized waves over medium and long distances



The compact, rotatable R&S®HL451 log-periodic HF antenna can be used for transmission and reception of horizontally polarized waves.

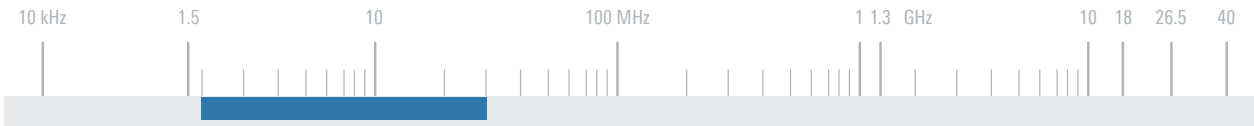
The antenna's transmission frequency range from 5 MHz to 30 MHz makes it particularly suitable for communications over medium and long distances. Reception is possible from 2 MHz so that all distances can be covered.

The antenna has been optimized for small size, low weight and minimum maintenance.

## Key facts

- ▮ Reception from 2 MHz
- ▮ Transmission from 5 MHz
- ▮ Unshortened half-wave elements for high gain despite extremely small size
- ▮ Easy and quick assembly
- ▮ Low maintenance
- ▮ Suitable for roof mounting





Specifications	
Frequency range	
Reception	2 MHz to 30 MHz
Transmission	5 MHz to 30 MHz
Polarization	linear/horizontal
Input impedance	50 Ω
VSWR	≤ 2 (5 MHz to 30 MHz)
Max. input power	1 kW CW/2 kW PEP
Gain (on 15 m mast)	
5 MHz to 30 MHz	6 dBi to 12.5 dBi

Max. wind speed	180 km/h (without ice deposit)
Connector	N female
MTBF	> 100000 h
Operating temperature range	-30°C to +50°C
Dimensions of antenna array (W × L)	approx. 16 m × 15 m (53 ft × 49 ft)
Weight of antenna array	approx. 260 kg (573 lb)

Ordering information	Type	Order No.
Log-Periodic HF Antenna	R&S®HL451	0733.8507.02
<b>Recommended extras</b>		
Lattice Mast, length: 15 m (standard)	R&S®KM451B2	4028.3400.02
Lattice Mast, length: 10 m (for roof mounting)	R&S®KM451B1	4028.3351.02
Hazard Light	R&S®KM451F1	4028.3500.02
Antenna Rotator	R&S®RD130	4059.8503.02
Rotary Joint/Adaption Set	R&S®RD008Z1	0720.6400.02
Control Unit	R&S®GB130	4059.8755.02
Set of Cables (connecting R&S®GB130 to R&S®RD130, lengths: 50/80/120/200 m)	R&S®GK130	4059.8855.0x (x = 2/3/4/5)
Other configurations on request.		

