

R&S®AK503 MOBILE HF ANTENNA

1.5 MHz to 30 MHz

Highly reliable HF antenna for mobile use



The R&S®AK503 mobile HF antenna has been designed especially for mobile use. Short installation and disassembly times and low space requirements for installation and transportation have been combined with good electrical characteristics.

Through optimized design with a focus on propagation conditions in the medium-wave and shortwave range, the antenna provides high reliability in radiocommunications.

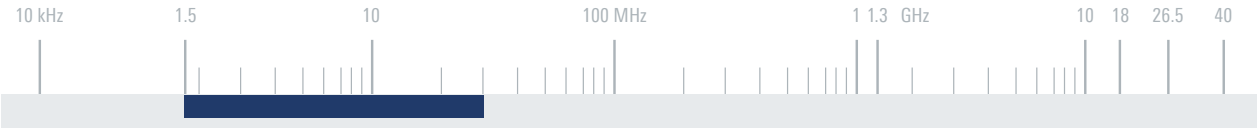
The automatic R&S®FK3150 antenna tuning unit ensures optimum antenna tuning in the entire operating frequency range.

Switching between the three operating modes (optimized for specific frequency and distance ranges) is performed manually at the antenna head.

Key facts

- Coverage of all distance ranges
- No skip zone
- Omnidirectional coverage with high-angle radiation (NVIS)
- Omnidirectional coverage up to 1000 km due to null fill
- Installation time approx. 10 min





Specifications

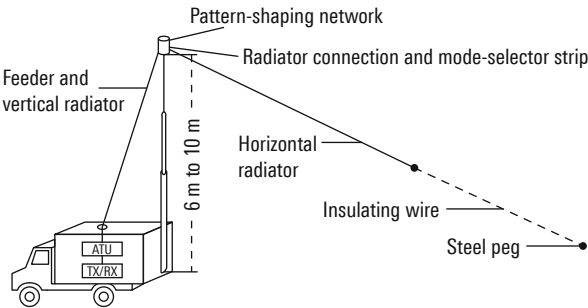
Frequency range	1.5 MHz to 30 MHz	
Max. input power	150 W CW	
Recommended operating range	mode 1	1.5 MHz to 6 MHz
	mode 2	6 MHz to 30 MHz (optimized)
	mode 3	1.5 MHz to 30 MHz for ground-wave communications and distances > 2000 km
Connector	clamp	
MTBF	> 100 000 h	
Operating temperature range	−40 °C to +55 °C	
Max. wind speed	without ice deposit	120 km/h
Dimensions	length including guy rope	approx. 35 m (115 ft)
	height	approx. 7 m to 11 m (23 ft to 36 ft)
Weight	approx. 4 kg (9 lb)	

Ordering information	Type	Order No.
Mobile HF antenna	R&S®AK503	0448.3226.02

Recommended extras

Antenna tuning unit	R&S®FK3150	6095.5855.02
Mast, length: 6 m, can be disassembled	R&S®KM011	0273.9116.02
Mast adapter for R&S®AK503 on R&S®KM011	R&S®KM011Z3	4021.7700.02

System overview with description of individual components



Typical azimuth patterns for various elevation angles

