

HF Antennas

Mobile HF Antenna

R&S® AK503



1.5 MHz to 30 MHz

Highly reliable HF antenna for mobile use

Features

- ◆ 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-in
- ◆ Installation time approx. 10 min



Brief description

The HF Antenna R&S® AK503 has been designed especially for mobile use. Short erection 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 radiocommunication.

The automatic Antenna Tuning Unit R&S® FK2100 ensures optimum antenna tuning in the entire operating frequency range.

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



Specifications

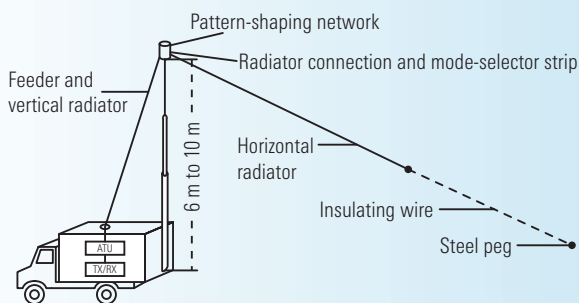
Frequency range	1.5 MHz to 30 MHz
Max. input power	150 W CW and PEP
Operation	
Mode 1	1.5 MHz to 30 MHz
Mode 2	6 MHz to 26 MHz (optimized)
Mode 3	for ground-wave communication and distances >2000 km
Connector	
Connector	clamp
MTBF	>100.000 h
MTRR	<1 h

Operating	
temperature range	-40°C to +55°C
Max. wind speed	120 km/h (without ice deposit)
Length including guy rope	approx. 35 m
Height	approx. 7 m to 11 m ¹⁾
Weight	approx. 6 kg

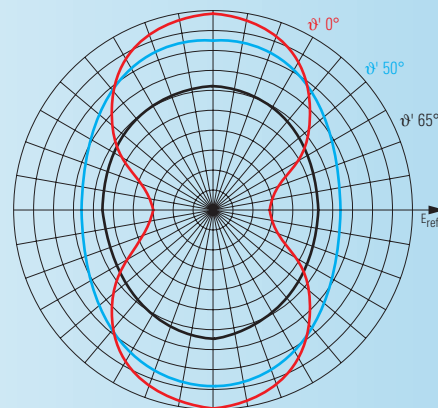
¹⁾ Maximum configuration.

Ordering information

Mobile HF Antenna	R&S®AK503	0448.3226.02	
Recommended extras			
Antenna Tuning Unit	R&S®FK2100	6046.8948.02	
Mast, 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



Azimuth patterns for various elevation angles ϑ' with high-angle radiation