



R&S AK501 (photo 30646-1)



R&S AK503 (photo 33165-4)

Special features of R&S AK503

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

Brief description

These HF antenna systems have been especially designed for mobile use. They combine short erection and disassembly times, little space requirement for installation and transportation with high-grade electrical characteristics. By optimum tailoring to the propagation conditions in the RF and shortwave range, the antenna systems ensure exceptionally high-quality mobile radiocommunication. The Antenna Systems R&S AK501 and R&S AK501A4 consist of two antennas (high-angle antenna and vertical antenna), which can be selected by remote control.

Special features of R&S AK501, R&S AK501A4

- ◆ Reliable radiocommunication over any distance, no skip zone
- ◆ Complete omnidirectional coverage even at medium distances due to null fill-in
- ◆ Fixed operation using high-angle antenna and vertical antenna as well as mobile operation using whip antenna



R&S AK501A4, disassembled (photo 31865-1)

Specifications

| | R&S AK501 | R&S AK501A4 | R&S AK503 |
|-----------------------------|--------------------------------|--------------------------|---|
| Frequency range | 1.5 MHz to 30 MHz | 1.5 MHz to 30 MHz | 1.5 MHz to 30 MHz |
| Polarization, switchable | horizontal or vertical | horizontal or vertical | |
| Nominal impedance | 50 Ω with ATU | 50 Ω with ATU | 50 Ω with ATU |
| VSWR | <1.5 with R&S FK859 (1.1 typ.) | depending on type of ATU | depending on type of ATU |
| Permissible input power | 1.15 kW CW and PEP | 400 W CW and PEP | 150 W CW and PEP |
| Permissible wind speed | 100 km/h (without ice) | 100 km/h (without ice) | 120 km/h (without ice) |
| Operating temperature range | -40°C to +55°C | -40°C to +55°C | -40°C to +55°C |
| Operating mode 1 | | | 1.5 MHz to 30 MHz |
| Operating mode 2 | | | optimized for 6 to 26 MHz |
| Operating mode 3 | | | for ground-wave communications and distances >2000 km |
| Mode selection | | | by movable clamp |
| Length of guy rope | 57 m | 46 m | 35 m |
| Height | 16.5 m | 11.5 m | 7 m to 11 m |
| Weight | 30 kg | 12 kg | 6 kg |

Ordering information

| Mobile HF Antenna System | 0280.4816.11 | 0425.8721.04 | 0448.3226.02 |
|-------------------------------|--------------|--------------|--------------|
| Recommended extras | | | |
| Antenna Tuning Unit R&S FK859 | | 0682.1018.02 | |