

R&S®AD066FW BROADBAND VHF/UHF COMMUNICATIONS ANTENNA SYSTEM

118 MHz to 453 MHz

Compact VHF/UHF transmitting/receiving antenna system for naval applications



The R&S®AD066FW is an omnidirectional VHF/UHF antenna system for naval applications. The system can be used for transmitting or for receiving only.

The R&S®AD066FW consists of the R&S®AD066F broadband VHF/UHF communications antenna, the R&S®FT066F beamforming network and the applicable R&S®AD066FW-K cable sets.

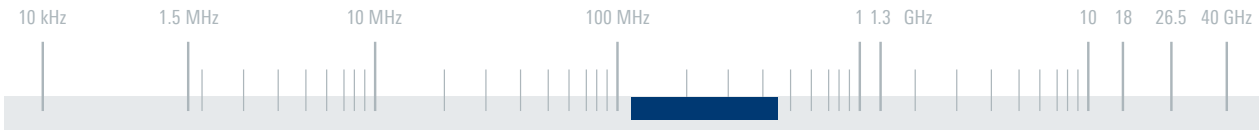
Eight vertically polarized dipoles are circularly arranged around a center support structure and combined by the beamforming network (BFN) to one output, resulting in an excellent omnidirectional behavior. The beamforming network can also be custom-designed to meet special customer requirements.

The R&S®AD066FW can fit around mast diameters of up to 700 mm. The antenna is delivered in eight identical segments for easy mounting and servicing.

Key facts

- ▶ Wide frequency range
- ▶ Excellent omnidirectionality
- ▶ High input power for simultaneous use of multiple radio lines
- ▶ Stackable antenna design
- ▶ Vertical polarization
- ▶ Especially designed for operation under harsh environmental conditions





Specifications

R&S®AD066F

Frequency range	118 MHz to 453 MHz
Input impedance	50 Ω, unbalanced
VSWR	< 3; 2.0 (typ.)
Gain	≥ 0 dBi; 2 dBi (typ.); in combination with R&S®AD066FW-K and R&S®FT066F
Input power	max. 600 W (CW) (depending on beamforming network)
Polarization	linear, vertical
Polarization decoupling	> 18 dB
Connectors	N female
Dimensions (Ø × H) ¹⁾	approx. 1.4 m × 1.5 m (5 ft × 5 ft)
Weight	approx. 150 kg (331 lb)

R&S®FT066F

Dimensions (W × H × L)	approx. 340 mm × 130 mm × 650 mm (13 in × 5 in × 26 in)
Weight	approx. 27 kg (60 lb)

R&S®AD066FW

Connector	N female
MTBF	> 100 000 h
Operating temperature range	-30 °C to +70 °C
Storage temperature range	-40 °C to +70 °C
Protection class	IPx6
Maximum wind speed	200 km/h (without ice deposit)

¹⁾ Incl. connectors and installation lugs.

Ordering information	Type	Order No.
Broadband VHF/UHF communications antenna system		
Broadband VHF/UHF communications antenna	R&S®AD066F	4090.0000.02
Beamforming network for R&S®AD066F (indoor use)	R&S®FT066F	4090.3500.02
Beamforming network for R&S®AD066F (seawater resistant)	R&S®FT066F	4090.3500.03
Cable sets for R&S®AD066F (model depends on application)	R&S®AD066FW-K	4090.1707.xx

Typical radiation patterns

