

# 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.

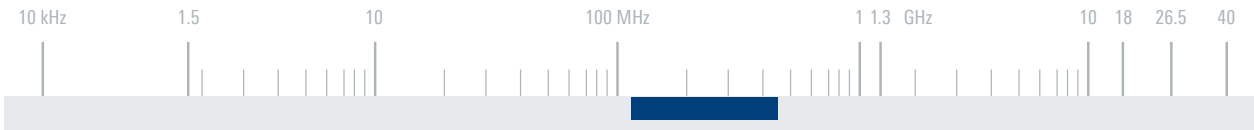
Eight vertically polarized dipoles are circularly arranged around a center support structure and combined by the beamforming network (BFN) to one output, resulting in an excellent omnidirectional behavior. The beamforming network can also be custom-designed to meet special customer requirements.

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**

<b>R&amp;S®AD066F</b>	
Frequency range	118 MHz to 453 MHz
Input impedance	50 Ω, unbalanced
VSWR	< 3; typ. 2.0
Gain	≥ 0 dBi; typ. 2 dBi; 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) <sup>1)</sup>	approx. 1.4 m × 1.5 m (5 ft × 5 ft)
Weight	approx. 150 kg (331 lb)
<b>R&amp;S®FT066F</b>	
Dimensions (W × H × L)	approx. 340 mm × 130 mm × 650 mm (13 in × 5 in × 26 in)
Weight	approx. 27 kg (60 lb)
<b>R&amp;S®AD066FW</b>	
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
Max. wind speed	200 km/h (without ice deposit)

<sup>1)</sup> Incl. connectors and installation lugs.

Ordering information	Type	Order No.
<b>Broadband VHF/UHF communications antenna system</b>		
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**

