

# R&S®AD033V3 OMNIDIRECTIONAL UHF ANTENNA

225 MHz to 450 MHz

Compact UHF transmitting/receiving antenna for naval applications



The R&S®AD033V3 is an omnidirectional UHF antenna for naval applications. The antenna can be used for transmitting or for receiving only.

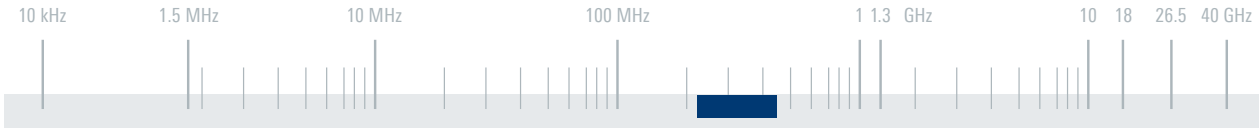
Eight vertically polarized dipoles are circularly arranged around a center support structure and combined to one output, resulting in an excellent omnidirectional behavior.

The R&S®AD033V3 can fit around mast diameters of up to 670 mm. The antenna is delivered in two prefitted half-shells for easy mounting to existing masts. Even refitting to existing ship structures is possible.

### Key facts

- ▶ Excellent omnidirectionality
- ▶ High input power for simultaneous use of multiple radio lines
- ▶ Stackable antenna design
- ▶ Reduced RCS
- ▶ Protected against lightning strikes by DC grounding
- ▶ For naval applications

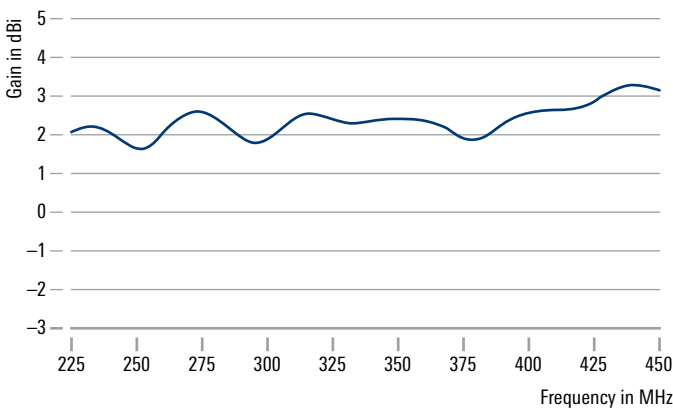




Specifications		
Frequency range		225 MHz to 450 MHz
Connector		7/16 (female), 50 Ω
VSWR		2.0 (typ.)
Gain		2 dBi (typ.)
Polarization		linear, vertical
Polarization decoupling		≥ 20 dB
Input power		max. 600 W (CW)
Azimuth pattern		omnidirectional
Maximum deviation from circularity	225 MHz to 400 MHz	< ±0.75 dB (typ.)
	> 400 MHz to 450 MHz	< ±1 dB (typ.)
Operating temperature range		-30°C to +55°C
Protection class		IP56
Maximum wind speed	without ice deposit	275 km/h
	with 30 mm ice deposit	180 km/h
Dimensions	diameter × height	approx. 1270 mm × 1000 mm (50 in × 39 in)
	inner diameter	approx. 670 mm (26 in)
Weight		approx. 85 kg (187 lb)

Ordering information	Type	Order No.
Omnidirectional UHF antenna, color: squirrel gray (RAL 7000)	R&S®AD033V3	4091.0004.02

**Typical antenna gain**



**Typical radiation patterns at 300 MHz**

