## R&S®HK055S1 OMNIDIRECTIONAL BROADBAND ANTENNA

27.5 MHz to 600 MHz

Compact transmitting/receiving antenna especially designed for operation on board ships





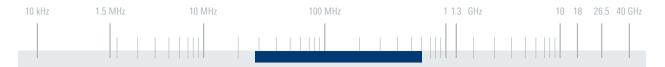
The R&S°HK055S1 omnidirectional broadband antenna covers the extremely wide frequency range from 27.5 MHz to 600 MHz.

It is designed for stationary transmission and reception and can be used for many types of communications and for monitoring tasks.

The antenna features outstanding characteristics; no tuning equipment is required, making it ideal for hopping and for multichannel operation.

## **Key facts**

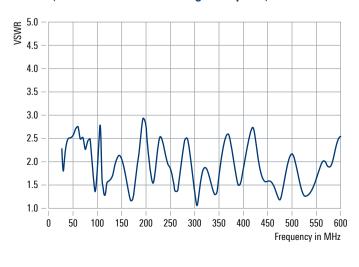
- ► Extremely wide frequency range
- ▶ Compact dimensions
- ► High efficiency
- Rugged design especially for rough handling on board ships
- ▶ Wide operating temperature range
- ► Especially suitable for multiband, multirole radios (MMR)



Specifications		
Frequency range		27.5 MHz to 600 MHz
Polarization		vertical
Input impedance		50 Ω
VSWR		2.5 (typ.) (measured on a 3 m $\times$ 3 m ground plane)
Gain	27.5 MHz to 110 MHz	$-1$ dBi to $+4$ dBi (typ.) (measured on a 3 m $\times$ 3 m ground plane)
	110 MHz to 600 MHz	<ul><li>-4 dBi to +4 dBi (typ.)</li><li>(measured under free-space conditions)</li></ul>
Azimuth pattern		omnidirectional
Maximum deviation from circularity		±1 dB
Elevation pattern	< 110 MHz	monopole-like
	> 110 MHz	dipole-like
Input power	≥ 30 MHz < 30 MHz	max. 100 W (CW) max. 50 W (CW)
Connector		N female
MTBF		> 100 000 h
Operating temperature range		−40°C to +85°C
Protection class		IP55
Maximum wind speed	without ice deposit	200 km/h
Dimensions	Ø×L	approx. 165 mm × 1550 mm (7 in × 61 in)
Weight		approx. 12 kg (27 lb)

Ordering information	Туре	Order No.
Omnidirectional broadband antenna	R&S°HK055S1	
Color: sand yellow (RAL 1002)		4067.0443.04
Color: silver gray (RAL 7001)		4067.0443.05
Color: light gray (RAL 7035)		4067.0443.06

## VSWR (measured on a 3 m × 3 m ground plane)



## Typical elevation pattern in the E plane at 120 MHz (measured on a 3 m $\times$ 3 m ground plane)

