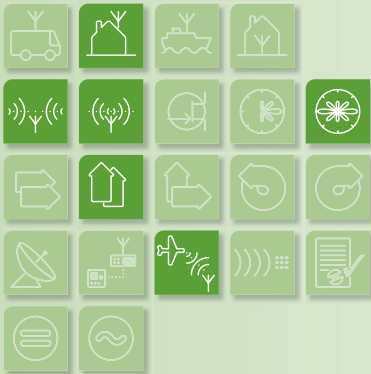


VHF/UHF Antennas

VHF/UHF Omnidirectional ATC Antenna R&S® HK 353A



100 MHz to 156 MHz (VHF)

225 MHz to 400 MHz (UHF)

**Omnidirectional VHF/UHF antenna for ATC
(air traffic control)**

Features

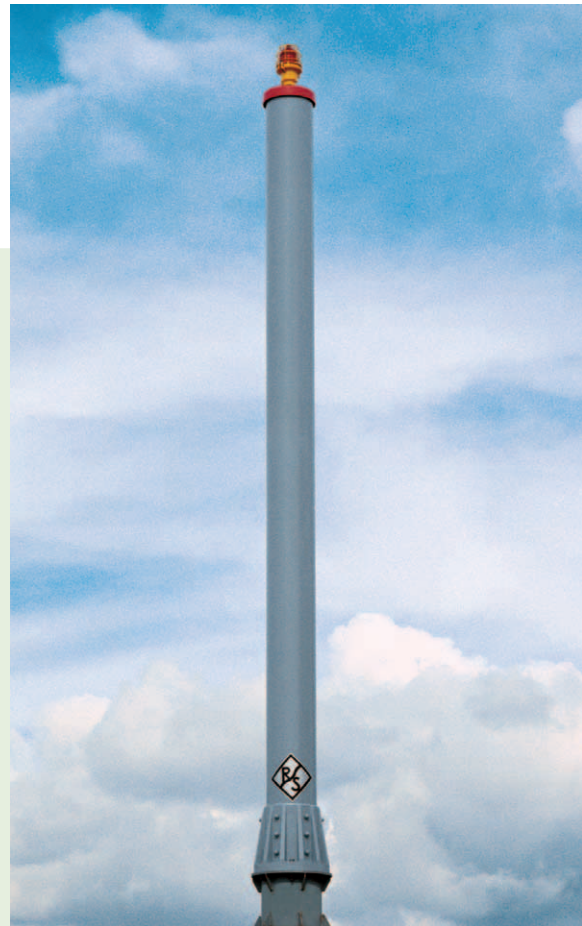
- ◆ Modular VHF and UHF dipoles
- ◆ Extremely high isolation with minimum space requirement
- ◆ Components individually combinable
- ◆ Self-supporting antenna mast

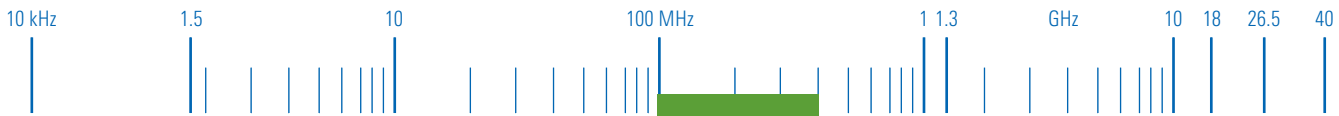
Brief description

The R&S® HK353A is designed for ATC ground-to-air communication. Due to its modular design, any number of antenna configurations (up to an overall height of 10 m) can be set up on the mast.

The most important system components are the self-supporting antenna mast, the VHF dipole, the UHF dipole and the specially developed decoupling units. The coaxial arrangement of the dipoles permits several transmitting and receiving antennas to be set up.

For easy transport, the antenna mast made of glassfiber-reinforced plastic comes in two sections (for masts longer than 6 m). The modular dipoles and the decoupling units are arranged inside the supporting cylinder.





Specifications

VHF Dipole R&S® HK153D2

Frequency range	100 MHz to 156 MHz
Polarization	linear/vertical
Max. input power	700 W CW per dipole
Input impedance	50 Ω
VSWR	<2.5 (with radome)
Gain	>2 dBi per dipole
Horizontal radiation pattern	omnidirectional
Uncircularity	<±1 dB
Dimensions (length × diameter)	1850 mm × 250 mm
Weight	6 kg

UHF Dipole R&S® HK253D2

Frequency range	225 MHz to 400 MHz
Polarization	linear/vertical
Max. input power	450 W CW per dipole
Input impedance	50 Ω

VSWR	<2.5 (with radome)
Gain	>2 dBi per dipole
Horizontal radiation pattern	omnidirectional
Uncircularity	<±1 dB
Dimensions (length × diameter)	925 mm × 130 mm
Weight	1.6 kg

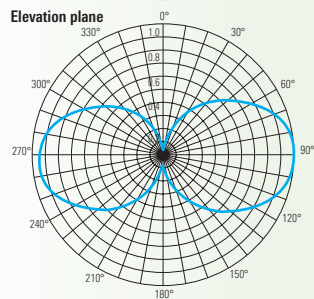
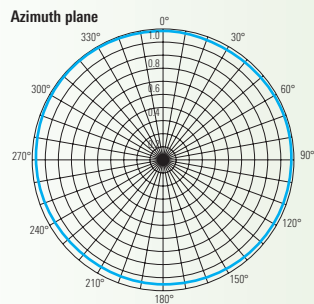
General data

Max. total input power	5 dipoles simultaneously at full power
Permissible wind speed	
Without ice deposit	190 km/h
With 50 mm radial ice deposit	177 km/h
Operating temperature range	-30 °C to +50 °C
MTBF	>500 000 h
Dimensions (height × diameter)	approx. 2 m to 10 m (max.) × 280 mm
Weight	depending on system configuration

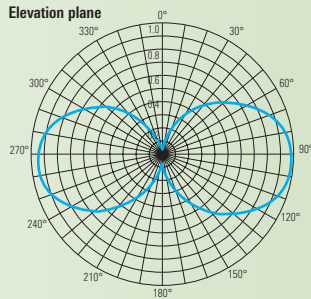
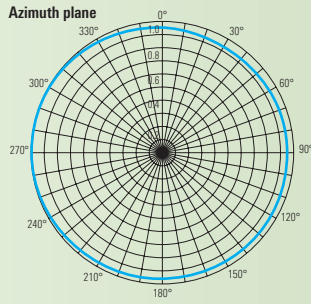
Ordering information

VHF/UHF Omnidirectional

ATC Antenna	R&S® HK353A	on request
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Typical VHF radiation patterns at 125 MHz



Typical UHF radiation patterns at 225 MHz