

# VHF/UHF Antennas

## Active Directional Antenna

### R&S® HE402



20 MHz to 87 MHz

Cardioid-shaped horizontal radiation pattern

#### Features

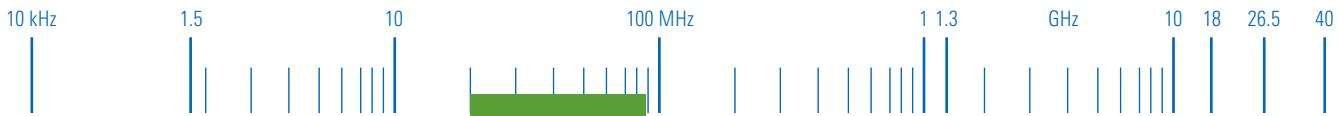
- ◆ Cardioid-shaped horizontal pattern
- ◆ Small dimensions
- ◆ Optimized for use in mobile or semi-mobile systems



#### Brief description

The Active Directional Antenna R&S® HE402 consists of two Active Receiving Dipoles R&S® HE302, a combining network and the mechanical dipole fixing elements.

The antenna receives linearly polarized waves and is matched to the required direction of polarization (horizontal or vertical) by appropriate installation.

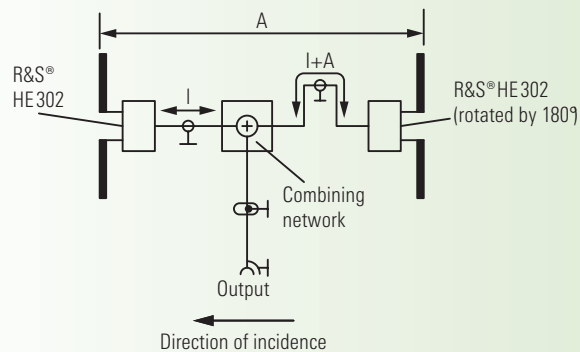


## Specifications

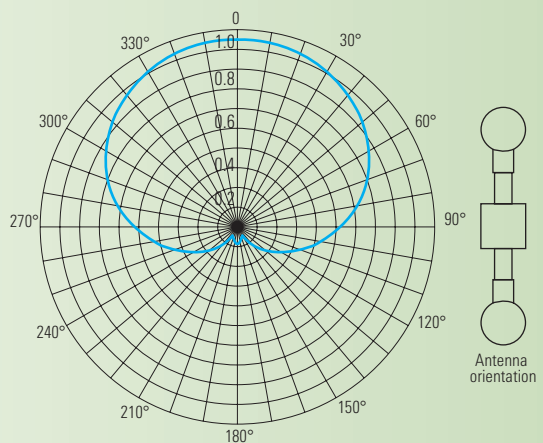
Frequency range	20 MHz to 87 MHz	Horizontal radiation	pattern	cardioid-shaped
Polarization	linear	IP2	>60 dBm	
Input impedance	50 $\Omega$	IP3	>30 dBm	
VSWR	<2.5	Power supply	18 V to 25 V DC (max. 340 mA)	
Electronic gain	-19 dB to +5 dB	Connector	N female	
Practical gain	-14 dBi to +10 dBi	MTBF	>25 000 h	
Directivity	5 dB (average)	Operating		
Noise figure		temperature range	-40 °C to +75 °C	
20 MHz	34 dB	Max. wind speed	180 km/h (without ice deposit)	
87 MHz	11 dB	Dimensions (L x W x H)	approx. 1.0 m x 0.2 m x 1.1 m	
Field strength sensitivity ( $\Delta f = 1$ kHz)		Weight	approx. 12 kg	
20 MHz	-12 dB( $\mu$ V/m)			
87 MHz	-22 dB( $\mu$ V/m)			

## Ordering information

Active			Recommended extras		
Directional Antenna	R&S®HE402	0684.2011.02	Power Supply Unit	R&S®IN115	4004.1707.02



Block diagram



Typical horizontal radiation pattern