VHF/UHF Antennas

Active Receiving Dipole R&S®HE 202





200 MHz to 1000 MHz
Optimized for very small dimensions

Features

- High sensitivity despite small dimensions
- ◆ Wide frequency range
- High immunity to nonlinear distortion
- High immunity to lightning strokes in the vicinity
- Low weight
- Extremely small dimensions
- ◆ Shock- and vibration-proof

Brief description

The Active Receiving Dipole R&S®HE 202 features a very wide frequency range despite its small dimensions. Its high input sensitivity is the result of optimized matching of the passive antenna structure to the active circuitry.

These characteristics allow several passive antennas to be replaced by an Active Receiving Dipole R&S®HE202.

Similar to a passive antenna with high-grade preamplifiers, the active antenna is highly insensitive to nonlinear distortion.

Specifications

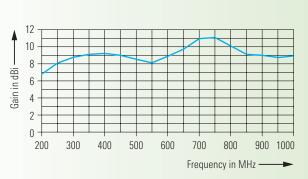
Frequency range	200 MHz to 1 GHz
Polarization	linear
Input impedance	50 Ω
VSWR	typ. <2.5
Electronic gain	5 dB to 9 dB
Practical gain	7 dBi to 11 dBi
Directivity	2 dB (average)
Antenna factor	10 dB to 22 dB
Noise figure	
200 MHz	6 dB
2 GHz	7 dB

Field strength sensitivity ($\Delta f = 1 \text{ kHz}$)		
200 MHz	−17 dB(µV/m)	
2 GHz	−2 dB(µV/m)	
IP2	>55 dBm	
IP3	>30 dBm	
Power supply	18 V to 30 V DC (max. 200 mA)	
Connector	N female	
MTBF	>50 000 h	
Operating		
temperature range	-40°C to +75°C	
Max. wind speed	180 km/h (without ice deposit)	
Dimensions (L \times H)	approx. 510 mm \times 240 mm	
Weight	approx. 2.1 kg	

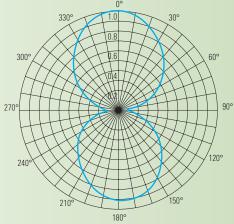
Ordering information

Active Descriping Dinele	DO CRIIT 202	0630.0310.02
Active Receiving Dipole	παδ πΕΖυΖ	0030.0310.02

Recommended extras		
Power Supply Unit	R&S®IN 115	4004.1707.02
Mast Adapter (for special		
polarization alignment		
only)	R&S®HE202Z1	0649.7510.02
RF Cable	R&S®HE 202Z2	0649.7785.02







Typical radiation pattern in the E plane at 500 MHz