

R&S®HE309E ACTIVE VERTICAL DIPOLE

20 MHz to 1.3 GHz

High sensitivity, large bandwidth and wide dynamic range



The R&S®HE309E active vertical dipole is designed to receive vertically polarized signals in the frequency range from 20 MHz to 1.3 GHz.

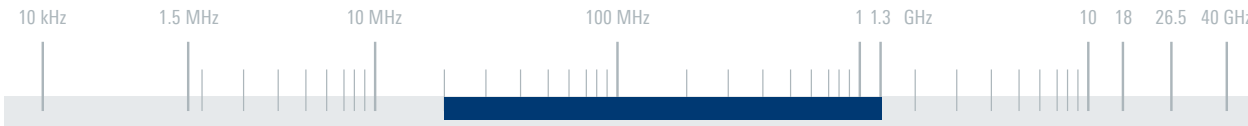
The lightweight and compact antenna is accommodated in a weatherproof and rugged fiberglass-reinforced plastic (GRP) radome that fully protects the receiving dipole against the effects of weathering.

Characterized by its small dimensions, it is ideal for use in mobile systems and provides optimum reception results even if space is limited.

A large bandwidth, wide dynamic range and excellent field strength sensitivity make the R&S®HE309E suitable for all receiving tasks that might occur in the field of communications, radiomonitoring and radiolocation.

Key facts

- ▶ Extremely wide frequency range
- ▶ High sensitivity (low inherent noise)
- ▶ High linearity and spurious-free dynamic range
- ▶ Compact dimensions
- ▶ Rugged and weatherproof design
- ▶ No deterioration of the radiation pattern due to divided dipole design



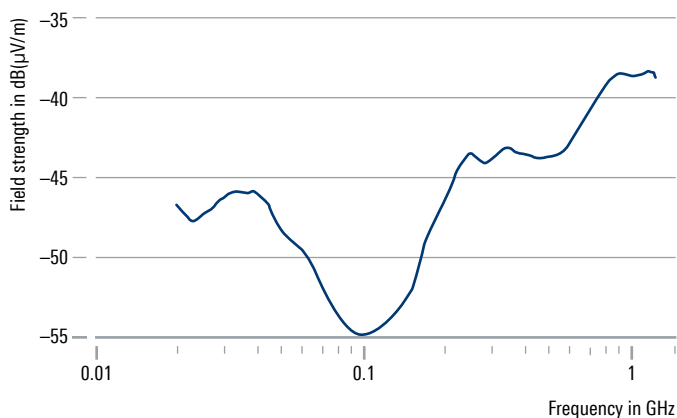
Specifications

Frequency range	20 MHz to 1.3 GHz	
Polarization	linear vertical	
Input impedance	50 Ω	
Antenna factor	approx. 4 dB (1/m)	
VSWR	< 3.0; 2.5 (typ.)	
Circularity of horizontal pattern	3 dB (typ.)	
IP2	60 dBm (typ.)	
IP3	30 dBm (typ.)	
Power supply	24 V DC (-3 V/+1 V) (max. 350 mA)	
RF connector	N female	
MTBF	> 100 000 h	
Operating temperature range	-40°C to +70°C	
Storage temperature range	-40°C to +85°C	
Protection class	IPx5, in line with EN 60259	
Maximum wind speed	without ice deposit	200 km/h
	with 30 mm ice deposit	180 km/h
Dimensions	Ø × L	approx. 1.21 m × 0.16 m (48 in × 5 in)
Weight	approx. 3 kg (7 lb)	

Ordering information

Ordering information	Type	Order No.
Active vertical dipole	R&S®HE309E	
Color: squirrel gray (RAL 7000)		4098.0000.02
Color: bronze green (RAL 6031)		4098.0000.03
Color: light ivory (RAL 1015)		4098.0000.04
Recommended extra		
Bias unit	R&S®IN600	4094.3004.xx

Typical field strength sensitivity at antenna output (bandwidth = 1 Hz, SNR = 0 dB)



Typical field patterns in the E plane

