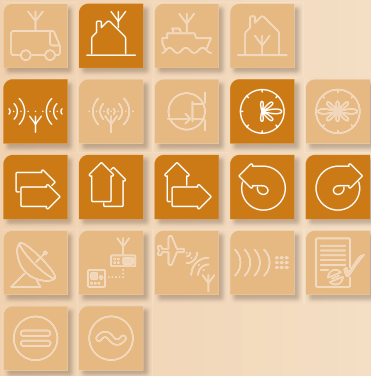


SHF Antennas

SHF Directional Antenna

System R&S® AC 090



1 GHz to 18 GHz/0.85 GHz to 26.5 GHz
Extremely broadband directional antenna
for radiomonitoring, steerable in azimuth
and elevation

Features

- ◆ Extremely broadband without change of feed
- ◆ 0.9 m reflector diameter
- ◆ Adjustable in azimuth and elevation
- ◆ System control via PC user interface (Windows NT/2000)



R&S® AC090 with optional R&S® AC308R2/R3

Brief description

The R&S® AC 090 is a stationary directional antenna that can be adjusted in azimuth and elevation.

The reflector has a diameter of 0.9 m and – depending on the feed used – receives signals in the range 1 GHz to 18 GHz or 0.85 GHz to 26.5 GHz. The frequency range can be extended to up to 40 GHz by flange-connected options.

The R&S® AC 090 is used for radiomonitoring tasks, for instance.

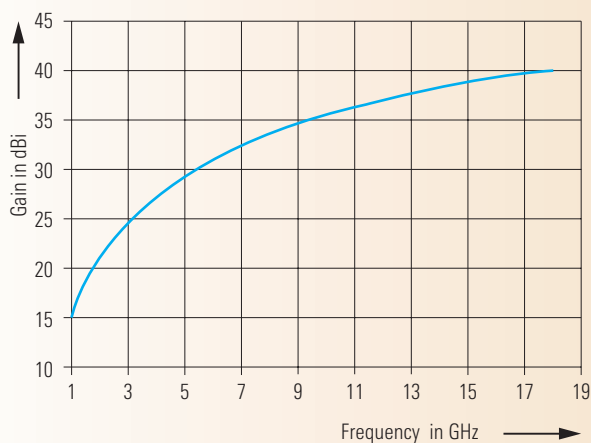


Specifications

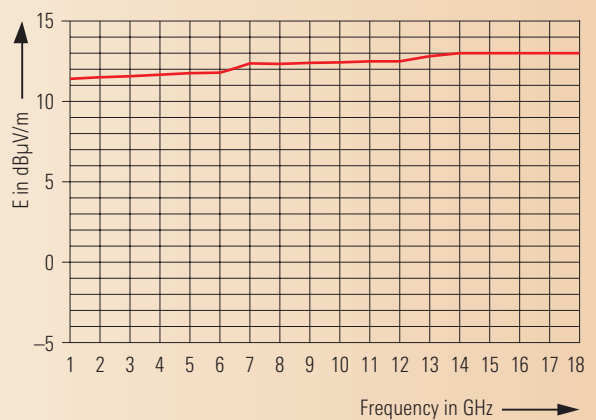
Frequency range		Connector	RPC3.5 female
Depending on feed	1 GHz to 18 GHz	MTBF	>8000 h
	0.85 GHz to 26.5 GHz	Operating temperature range	-30°C to +50°C
Gain	15 dBi to 40 dBi (1 GHz to 18 GHz)	Max. wind speed	180 km/h (without ice deposit)
Half-power beamwidth	20° to 1.5° (1 GHz to 18 GHz)	Reflector diameter	approx. 0.9 m
Min. field strength		Weight	approx. 165 kg
With R&S®HL024S9	13 dB(μV/m), (Δf = 1 MHz)		
Range of rotation			
Azimuth	±180°		
Elevation	-5° to +95°		

Ordering information

SHF Directional Antenna			
System	R&S®AC090	4051.4509.00	
Feed options (see also pages 122 to 134):			
Log-Periodic Antenna, 0.85 GHz to 26.5 GHz			
Basic model	R&S®HL050S1	4065.0100.02	
With preamplifier	R&S®HL050S7	4064.6040.02	
Crossed Log-Periodic Antenna, 1 GHz to 18 GHz			
Basic model	R&S®HL024S1	4055.1256.02	
With passive polarization network	R&S®HL024S2	4052.1003.02	
With preamplifier, 1 RF output	R&S®HL024S7	4042.8505.02	
	With preamplifier, 2 RF outputs	R&S®HL024S8	4042.7509.02
	With active polarization network	R&S®HL024S9	4047.6252.02
Recommended extras			
	Reflector Antenna, 18 GHz to 26.5 GHz, 29 dBi to 33 dBi	R&S®AC308R2	4051.6001.02
	Reflector Antenna, 26.5 GHz to 40 GHz, 33 dBi to 36 dBi	R&S®AC308R3	4051.6253.02



Typical gain



Typical minimum receive field strength
(for a receiver with $F = 15$ dB, $\Delta f = 1$ MHz)