

SHF Antennas

SHF Directional Antenna

System R&S® AC 120



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
- ◆ 1.2 m reflector diameter
- ◆ Adjustable in azimuth and elevation
- ◆ System control via PC user interface (Windows NT/2000)



Brief description

The R&S® AC 120 is a stationary directional antenna that can be adjusted in azimuth and elevation.

The reflector has a diameter of 1.2 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 120 is used for radiomonitoring tasks, for instance.

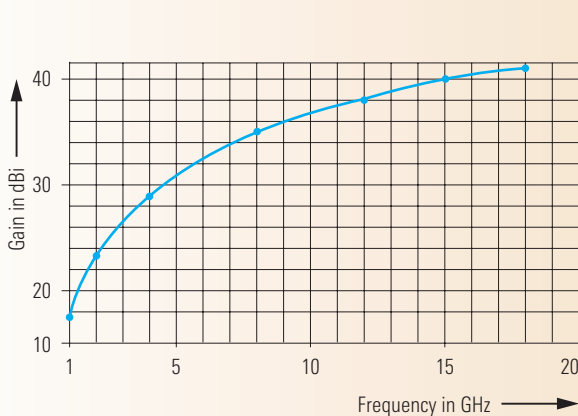


Specifications

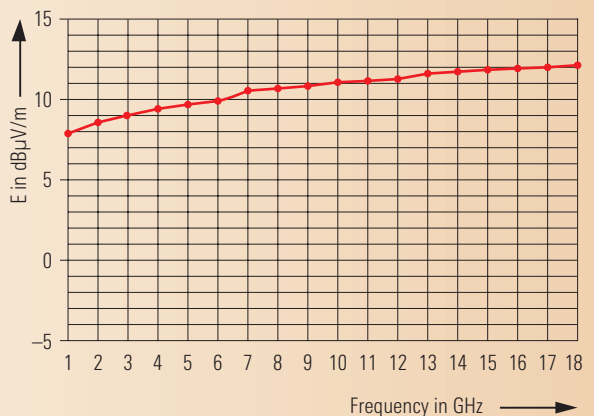
Frequency range		Connector	RPC3.5 female
Depending on feed	1 GHz to 18 GHz	MTBF	>8000 h
	1 GHz to 26.5 GHz	Operating	
Gain	15 dBi to 42 dBi (1 GHz to 18 GHz)	temperature range	-30°C to +50°C
Half-power beamwidth	20° to 1° (1 GHz to 18 GHz)	Max. wind speed	180 km/h (without ice deposit)
Min. field strength		Reflector diameter	approx. 1.2 m
With R&S®HL024S9	10 dB(μV/m), (Δf = 1 MHz)	Weight	approx. 170 kg
Range of rotation			
Azimuth	±180°		
Elevation	-5° to +95°		

Ordering information

SHF Directional Antenna					
System	R&S®AC 120	4051.5005.00	With preamplifier,		
Feed options (see also pages 122 to 134):			2 RF outputs	R&S®HL024S8	4042.7509.02
Log-Periodic Antenna, 0.85 GHz to 26.5 GHz			With active		
Basic model	R&S®HL050S1	4065.0100.02	polarization network	R&S®HL024S9	4047.6252.02
With preamplifier	R&S®HL050S7	4064.6040.02	Recommended extras		
Crossed Log-Periodic Antenna, 1 GHz to 18 GHz			Reflector Antenna, 18 GHz to 26.5 GHz,		
Basic model	R&S®HL024S1	4055.1256.02	29 dBi to 33 dBi	R&S®AC308R2	4051.6001.02
With passive			Reflector Antenna, 26.5 GHz to 40 GHz,		
polarization network	R&S®HL024S2	4052.1003.02	33 dBi to 36 dBi	R&S®AC308R3	4051.6253.02
With preamplifier,					
1 RF output	R&S®HL024S7	4042.8505.02			



Typical gain



**Typical minimum receive field strength
(for a receiver with F = 15 dB, Δf = 1 MHz)**