

Steerable Microwave Antenna System AC180



AC180 with flanged AC308R2 and AC308R3 (both optionally)

Brief description

The **AC180** is a directional antenna adjustable in azimuth and elevation with a reflector diameter of 180 cm. It is suitable for general radiomonitoring tasks in the frequency range 1 to 26.5 GHz or 1 to 18 GHz depending on the feed used. The frequency range can be enhanced to 40 GHz by flange-connected options.

- 1.8 m reflector diameter
- Extremely wide frequency range using the same feed
- Adjustable in azimuth and elevation
- Enhanced antenna gain
- System control (rotator, antenna and polarization selection) via PC interface (Windows NT4.0)

Available feeds:

HL025S1	Log.-Per. antenna
HL025S7	HL025 with pre-amplifier
HL024S1	crossed log.-per. antenna
HL024S2	HL024A1 with passive polar.-network
HL024S5	HL024A1 with band pre-amplifier 2 - 4 / 4 - 8 / 8 - 12 / 12 - 18 GHz
HL024S7	HL024A1 with pre-amplifier
HL024S8	HL024A1 with two pre-amplifiers
HL024S9	HL024A1 with active polar.-network

Options (laterally flanged, retrofittable):

AC308R2	250mm reflector antenna, 29 to 33 dBi
AC308R3	250mm reflector antenna, 33 to 36 dBi

Specifications

Frequency range	1 to 26.5 GHz/ (depending on feed)	1 to 18 GHz/
Gain	22 to 46 dBi	
Half-power beam width	12° to 0.7°	
Minimum field strength with HL024S9	6 dB(μV/m)	(Δf = 1 MHz)
Range of rotation		
Azimuth	±180°	
Elevation	-5° to +90°	
Connector	RPC3.5 (female)	
Operating temperature	-30 to +55°C	
Max. wind speed (without ice deposit)	160 km/h	
Reflector diameter	1.8 m	
Weight	420 kg	

Frequency range: (GHz)

1 to 26.5
1 to 26.5
1 to 18
1 to 18
2 to 18 (active)
1 to 18 (passive)
1 to 18
1 to 18
1 to 18

Polarisation:

linear
linear
H and V
H, V, RHC or LHC
H or V
H or V
H and V
H, V, RHC or LHC

18 to 26.5
26.5 to 40

H, V or 45°
H, V or 45°