

# Steerable Microwave Antenna System AC120



## Brief description

The **AC120** is a directional antenna adjustable in azimuth and elevation with a reflector diameter of 120 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.

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

## Available feeds:

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

Options (laterally flanged, retrofittable):

<b>AC308R2</b>	250mm reflector antenna, 29 to 33 dBi
<b>AC308R3</b>	250mm reflector antenna, 33 to 36 dBi

## Specifications

Frequency range	1 to 26.5 GHz/ (depending on feed) 1 to 18 GHz)
Gain	18 to 42 dBi
Half-power beam width	15° to 1°
Minimum field strength with HL024S9	10 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)	180 km/h
Reflector diameter	1.2 m
Weight	170 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°