

# Cavity Backed Spiral Antenna

6-18GHz

This model is a broadband antenna ideally suited for amplitude matching and phase or gain tracking. It is particularly designed for EMC surveillance, direction finding, telemetry and airborne monitoring receiving systems.

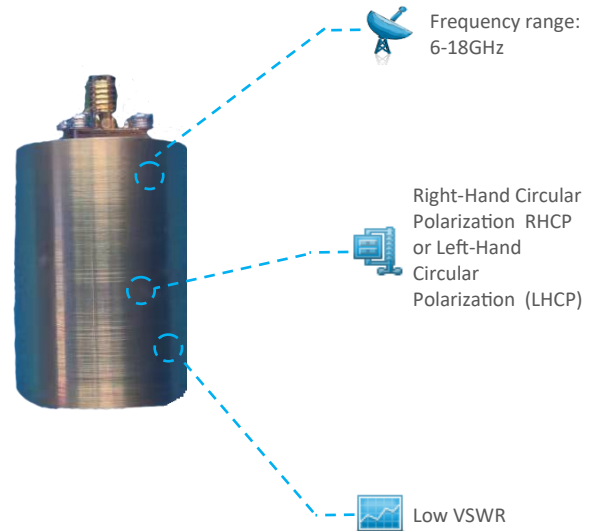
The spiral antenna type, which can be used as a separate component antenna or as broadband feed for reflector type dish antenna, is available in RHCP or LHCP.

Throughout its performance, it shows an excellent impedance match and radiation pattern control over the broad operation bands.

Its lightweight and compact design matches its endurance and reliability in harsh and extreme environmental conditions.

Its convenient shape reduces the antenna volume and weight making it specially suitable for mobility requirements during operation.

- Low VSWR
- Left Hand Circular Polarization (LHCP) or Right-Hand Circular Polarization RHCP
- Axial ratio 3dB Typical
- Excellent impedance match and radiation pattern control
- SMA Female Connector



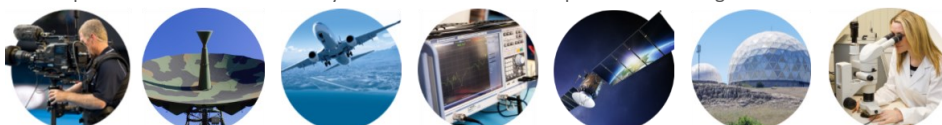
## RF Parameters

Frequency Range	6-18GHz		
Gain	-1~6 dB		
Polarization	Right-Hand Circular Polarization RHCP or Left-Hand Circular Polarization (LHCP)		
Axial Ratio Typ.	≤3 dB		
3dB Beamwidth	Min	50°	
	Max	110°	
VSWR Typ.	≤2.5		
Input Type	Coaxial	Impedance (Ω)	50
Operation Temperature	-55°C~ +75°C	Size	≤Φ25mm×H35mm (excluded connector)
Storage Temperature	-65°C~ +85°C	Net Weight (Kg)	0.05
Input Connector	SMA Female	Location	Indoor
Material	Aluminium		

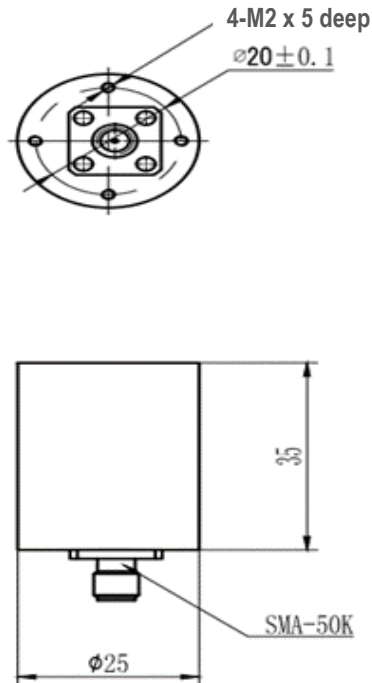
Note 1: The specification provided is at nominal bias voltage and at 25°C unless otherwise specified.

Note 2: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 3: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.



**Outline Drawing:**  
All dimensions are in mm



**Typical RF Performance**

**Gain**

Frequency (GHz)	Max Gain (dB)
6	-2.4
8	-0.9
10	1.2
12	3.7
14	4.6
16	5.3
18	5.8

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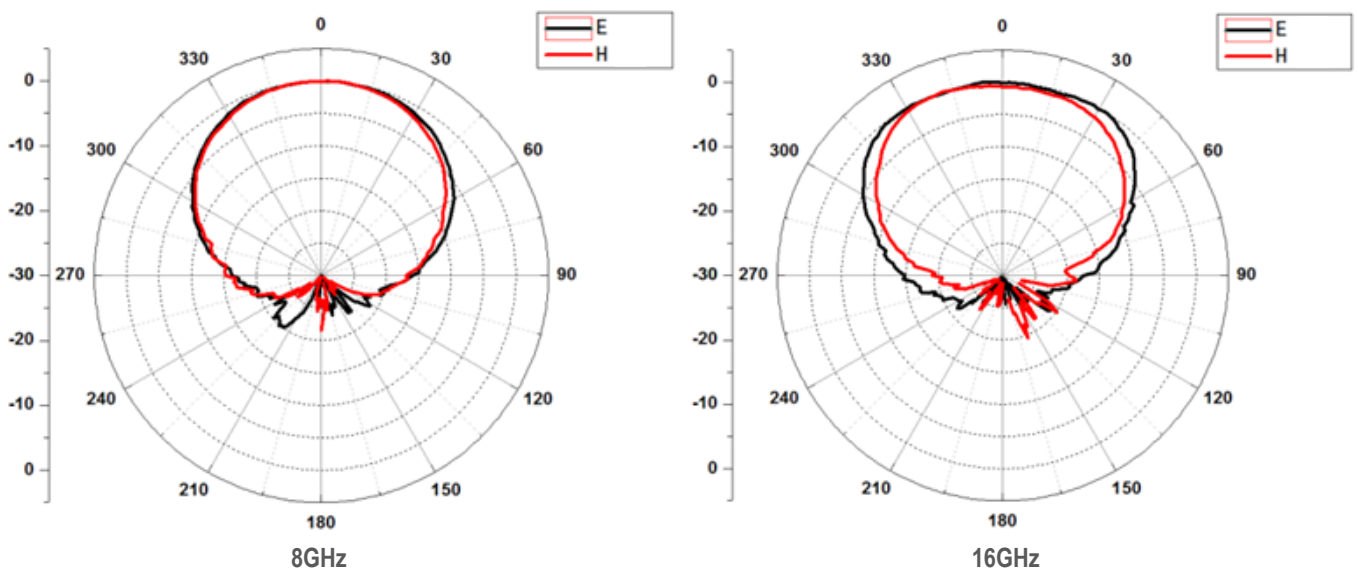
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## Beamwidth

Frequency (GHz)	E-Plane 3dB Beamwidth	H-Plane 3dB Beamwidth
6	69°	75°
8	66°	62°
10	59°	60°
12	89°	86°
14	75°	67°
16	97°	85°
18	99°	92°

## Pattern



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