

Cavity Backed Spiral Antenna

The OBS-1080 is a compact, moderate gain, moderate VSWR, circularly-polarized cavity-backed spiral antenna designed to transmit and receive in the frequency band of 1.0 GHz to 8.0 GHz. The antenna exhibits an excellent impedance match and radiation pattern.

It is capable of receiving both linearly polarized signals and a circularly polarized signal. The linear gain (dBil) is about 3 dB lower than the circular gain (dBic).

The antenna has the advantages of a low profile, a planar aperture, no phase center offset, near constant beam width across the frequency band, normally symmetrical radiation beamwidth, extreme flexibility for carrying, and light weight.

The advantages render the antenna a very good candidate for electronic-warfare, direction-finding, telemetry and surveillance systems, as well as flush-mounted airborne applications. The antenna can be used as a broadband feed for reflector antennas.

The antenna's outermost dimensions are a diameter of 68mm and height of 50mm.



Features

- Very convenient to carry
- Wide frequency band
- Light Weight
- small volume
- Easy package
- Main lobe width
- With circular polarization, wide beam width

Applications

- Satellite communications
- Personal mobile communications
- Electronic Warfare, Direction Finding, Telemetry and Surveillance Systems
- Embedded Airborne Applications

Electrical Specifications

Frequency Range(GHz)	1.0-8.0
Nominal Gain	2 Typ ~ 5.5 Typ
VSWR	2.5 : 1 Maximum ; 2.0:1 Typical
Pattern	Directional Beam
3 dB Beamwidth	65° Minimum , Typical
10 dB Beamwidth	120° Typical
Input Impedance	50 Ohms Nominal
Input Connector	SMA female

PRODUCT DIMENSIONS

