

CSA-218-AR & CSA-218-AL

The **CSA-218-A** is a compact, cavity-backed spiral antenna designed to transmit and receive in the frequency band of 2.0 GHz to 18.0 GHz. The antenna exhibits an excellent impedance match and radiation pattern. It is available in either right hand circular polarization (**CSA-218-AR**) or left hand circular polarization (**CSA-218-AL**). 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). These 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 RF output of the antenna is a type SMA female connector, located at the bottom of the antenna. The antenna is rated for 1 Watt of input power.



SPECIFICATIONS:

Frequency	2.0 GHz to 18.0 GHz
Input Impedance	50 Ohms Nominal
Input Connector	SMA female
VSWR	2.5 : 1 maximum; 2.0 : 1 Typical
Pattern	Directional Beam
Nominal Gain	2 GHz to 4 GHz: -3dBil to 0dBil typical 4 GHz to 18 GHz: 0dBil to 1dBil typical
Axial Ratio	45° from Major Lobe: 3 dB Maximum
Polarization	CSA-218-AR: Right Hand Circularly Polarized. CSA-218-AL: Left Hand Circularly Polarized
Power	1 Watt CW
Size	2.6 " (6.6 cm) dia x 2.0" (5.1 cm) with connector
Weight	6 oz (.17 kg)
Mounting	2.000" bolt circle of four #4-40 X .25" deep holes
Temperature Range	-55° C to 85° C (-67° F to 185° F)