

Antenna Panel Array

The antenna panel array is an interferometer array of left-hand circularly polarized spiral antennas. There are three sets of four spirals covering the frequency bands from 0.5 to 40 GHz with an azimuth FoV of $\pm 60^\circ$.

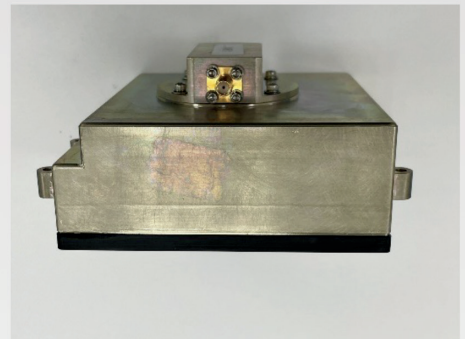
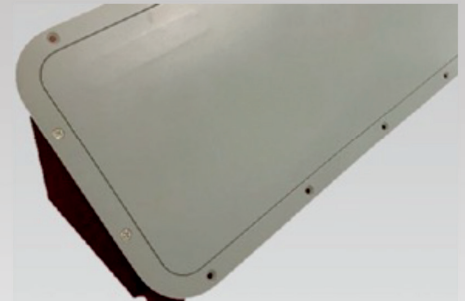
It is designed for aircraft use per RTCA DO-160G and MIL-STD-810.

It is constructed of an aluminum housing and Tefzel radome with stainless steel hardware.

- Operational Altitude: 0 to 55,000 ft
- Operational Temperature: -55° to $+71^\circ\text{C}$
- Dimensions: 23.4" wide x 7.9" high x 3" deep
- Power Handling: 2W CW with 3 dB beamwidth of 60° to 90°

Features

- Frequency coverage 0.5 to 40 GHz
- Full instantaneous bandwidth operation
- Broad field of view
- Flight-qualified



IFA-3S-0540-L-101

TYPICAL PERFORMANCE Azimuth FoV= +/-60°

Low-Band	Mid-Band	High-Band
0.5 to 6.5 GHz	6 to 18 GHz	18 to 40 GHz
SMA-F connector	SMA-F connector	2.9mm-F connector
Gain: 1 GHz: -7 dBic	Gain: 6 GHz: -2 dBic	Gain: 18 GHz: 0 dBic
2 GHz: 0 dBic	9 GHz: +1 dBic	26 GHz: -1 dBic
6.5 GHz: +2 dBic	18 GHz: +1 dBic	40 GHz: -3 dBic
Axial Ratio: (> 1 GHz)	Axial Ratio:	Axial Ratio:
Boresight: 3 dB	Boresight: 3 dB	Boresight: 3 dB
FoV: 3 dB	FoV: 6 dB	FoV: 6 dB
VSWR: <3.0:1 typical	VSWR: <2.5:1 typical	VSWR: <4.0:1 typical



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