ORBAN MICROWAVE

PRODUCT SHEET

GPS L1, L or S-Band Planar Isoflux Antennas

This family of space-qualified antennas is available for L- and S-Band, with extended options for C- and X-Band. Similar designs have already been successfully deployed on space missions.

Application

- **Planar Isoflux antennas** are optimized for peak performance in Low Earth Orbit (LEO) satellite operations.
- **Uniform coverage** is achieved through their torus (doughnut-shaped) radiation pattern, maintaining consistent signal strength across the satellite's coverage area and stable links with ground stations.
- **C- and X-Band options** may use mechanical cavity Isoflux antennas, which can be more practical in size and implementation at higher frequencies.

Key Features

- Isoflux radiation pattern
- Operate at GPS L1, L or S-Band
- Circularly polarized
- Excellent axial ratio across all elevations
- Good front-to-back ratio
- Antenna is grounded for protection against static buildup

Options

- RHCP or LHCP
- Hemispheric radiation pattern
- Operating at C or X-Band

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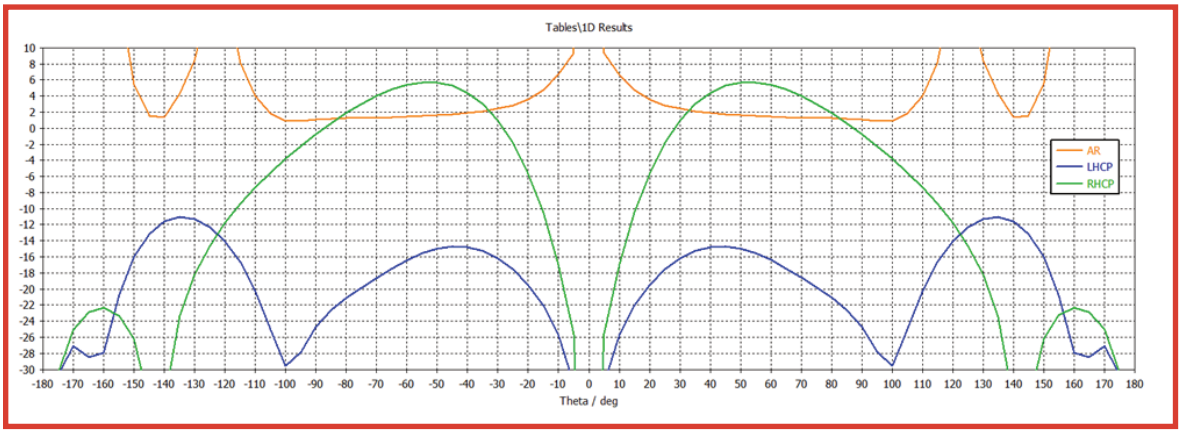

About us

Orban Microwave, founded in 1996, designs and manufactures advanced antennas and RF subsystems for space, radar, GNSS, and avionics applications.

We deliver high-quality, reliable, and efficient solutions supporting military, commercial, and industrial missions.

Our portfolio includes antenna arrays, AESA systems, wideband and omnidirectional antennas, quadrifilars, and a range of RF products such as T/R modules, power amplifiers, low-noise amplifiers, transponders, and RF switches.

Specifications

- Gain: 5.5dBi @ 40° elevation
- Axial ratio: <2 @ 40° elevation
- 3% bandwidth

Dimensions

- GPS L1: 300mm diameter
- L-Band: 270mm
- S-Band: 220mm
- Low profile: less than 5mm thick

Contact us for a complete set of anechoic chamber data

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