



## HIGH-GAIN X-BAND ANTENNA

The PULSAR-XANT-PLUS is a high-gain, lightweight, low-profile X-Band patch antenna designed for, but not limited to, CubeSat missions. It is compatible with the CubeSat standard in terms of height limitations for mounts on the exterior chassis. If your mission has a demanding link budget requiring high data-rates then the XANT-PLUS is the one for you, featuring a low profile, high-gain four element (2x2) array.

### KEY HIGHLIGHTS:

- High data-rate for space missions needing to downlink high data volumes
- High gain for space missions where greater link budget margins are needed, or simply to close the link
- Sub 2 dB axial ratio over the entire X-Band of operation, with both LHCP and RHCP versions available
- Extremely light-weight minimalistic design
- Performance insensitive to the surrounding ground plane allowing seamless integration



#### COMPATIBLE

Covers the entire X-Band frequency range of 8.025 - 8.40 GHz with a small mechanical profile.



#### PERFORMANCE

High gain, sub 2 dB axial ratio over the entire X-Band frequency range offering exceptional performance.



#### RELIABILITY

The light, minimal, and rugged design offers extreme reliability with a hard gold layer protecting the antenna elements from the harsh space environment for superior durability.

# TECHNICAL SPECIFICATIONS

| General                 | PULSAR-XANT-PLUS       |
|-------------------------|------------------------|
| Frequency Range         | 8.025 GHz – 8.40 GHz   |
| Bandwidth               | 375 MHz                |
| Temperature             | -40°C to +85°C         |
| Mass                    | 8 g                    |
| Gain                    | 12 dBi $\pm$ 0.5 dB    |
| Axial Ratio             | < 2 dB across the band |
| $S_{11}$                | < -14 dB               |
| Polarisation            | LHCP / RHCP            |
| Max RF Power            | 5 W (37 dBm)           |
| Connector Type          | Straight SMP           |
| Design Life             | > 2 years in LEO       |
| Width                   | 43 mm                  |
| Height (excl.connector) | 1.65 mm                |
| Length                  | 43 mm                  |

To make an enquiry, request a quotation or learn about AAC Clyde Space's other products and services, please contact: [enquiries@aac-clyde.space](mailto:enquiries@aac-clyde.space)



## #SPACEISAWESOME

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