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SPACE



Cape Peninsula
University of Technology

COMMUNICATIONS

PULSAR-XANT

HIGH DATA RATE LOW PROFILE



The PULSAR-XANT is a low profile X-Band patch antenna designed for CubeSat missions. It is compatible with the CubeSat standard in terms of height limitations for mounts on the exterior chassis. For more demanding link budgets, our PULSAR-XANT-PLUS (pictured above) is the one for you, with a low profile and a four element array.

KEY HIGHLIGHTS:

- For space missions where a high data rate downlink is required
- The PULSAR-XANT has three versions available to ensure a sub 3dB axial ratio over the entire X-band
- The PULSAR-XANT-PLUS maintains a sub 2dB axial ratio over the entire X-band with versions available in both LHCP and RHCP
- Insensitive to the surrounding ground plane which makes integration simple



COMPATIBLE

Covers the entire X-Band frequency range of 8.025 - 8.45 GHz



PERFORMANCE

With high gain, and sub 2 dB (PULSAR-XANT-PLUS) and 3 dB (PULSAR-XANT) axial ratio over the X-Band frequency range the PULSAR-XANT series offers exceptional performance.



RELIABILITY

The light and rugged design offers exceptional reliability.

TECHNICAL SPECIFICATIONS

General	XANT	XANT-PLUS
Frequency Range	8.025 GHz – 8.45 GHz	8.025 GHz – 8.45 GHz
Bandwidth	200MHz	425MHz
Temperature	-40°C to +85°C	-40°C to +85°C
Mass	< 9 g	< 29 g
Gain	7.75 dBi ± 0.5 dB	11.5 dBi ± 0.5 dB
Axial Ratio	< 3dB across the band	< 2 dB across the band
S ₁₁	< -15 dB	< -14 dB
Polarisation	LHCP / RHCP	LHCP / RHCP
Max RF Power	2W (33 dBm)	5W (37 dBm)
Connector Type	Straight SMP	Straight SMP
Design Life	2 years in LEO	2 years in LEO
Width	36 mm	58 mm
Height	4.7 mm	4.7 mm
Length	36 mm	58 mm

To make an enquiry, request a quotation or learn about AAC Clyde Space's other products and services, please contact:

enquiries@aac-clydespace.com



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