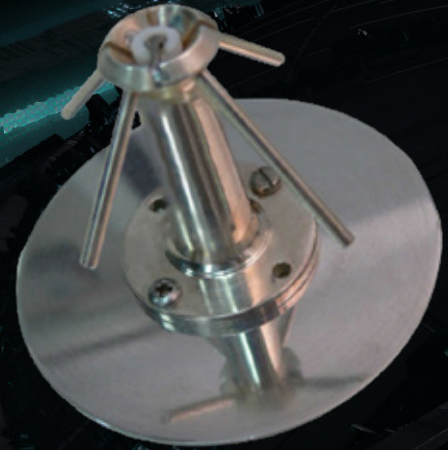


HIGH GAIN WIDE BEAM WITH PATCH ANTENNA



The AAC SpaceQuest developed AC-2000 nanosatellite polarized S-band antenna has been designed with high performance and ease of system integration in mind. This flight proven commercially available solution covers a bandwidth of up to 300 MHz and is compatible with the nanosatellite standard. With compact design, high gain, and radiation efficiency the antenna is easily integrated with S-band nanosatellite payloads. This robust turnstile circular design is ideal for applications where true circularity and low elevation angle performance is required. Its small size, low profile, rugged design and high directionality make it an excellent addition to the system. The antenna also has a built-in ground plan and can include an optional protective cover.

KEY HIGHLIGHTS:

- RH or LH Circular Polarization
- Low Eccentricity
- Rugged Compact Design
- Integrated Ground Plane
- SMA RF Output
- Space Qualified



COMPATIBLE

Our AC-2000 S-Band patch antenna can be easily incorporated into the CubeSat design and covers the entire S-Band frequency range of 2000 MHz to 2300 MHz.



PERFORMANCE

With high gain, 2 dBi or 2 dBic, the AAC SpaceQuest developed AC-2000 offers exceptional performance.



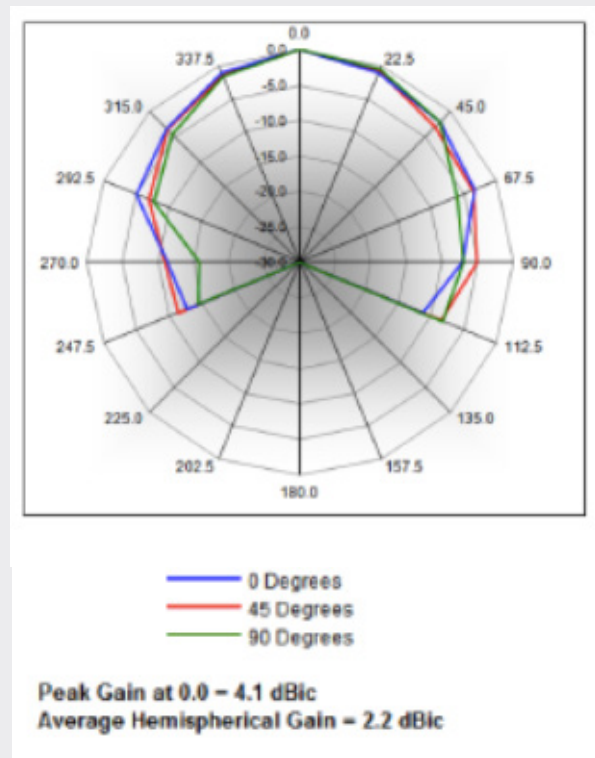
RELIABILITY

The light and rugged design offers exceptional reliability. The flight-proven antenna has a built-in ground plan and can include an optional protective cover.

TECHNICAL SPECIFICATIONS

General Specifications	
Bandwidth:	300 MHz Bandwidth (2000 MHz to 2300 MHz)
VSWR:	1.5 : 1.0
Peak Gain:	2 dBi or 2 dBic
Impedance:	50 Ohms
Mass:	~100 grams
Size:	Approximately 2" x 2" (Frequency Dependent)
Operating Temperature:	-40°C to +80°C (Storage Temperature: -50°C to +100°C)

Antenna Gain and Beam Pattern				
S-Band		Phi		
Point	Theta	0	45	90
1	0.0	0.0	0.0	0.0
2	22.5	-1.0	-0.9	-0.5
3	45.0	-2.1	-3.1	-2.1
4	67.5	-3.4	-3.5	-6.0
5	90.0	-7.1	-5.0	-7.0
6	112.5	-11.3	-8.5	-8.3
7	135.0	-30	-30	-30
8	157.5	-30	-30	-30
9	180.0	-30	-30	-30
10	202.5	-30	-30	-30
11	225.0	-30	-30	-30
12	247.5	-12.8	-11.5	-14.5
13	270.0	-11.4	-11.0	-15.8
14	292.5	-5.0	-7.0	-7.8
15	315.0	-3.4	-3.5	-4.8
16	337.5	-1.0	-1.5	-1.6



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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www.aac-clyde.space

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