



# HIGH GAIN WIDE BEAMWIDTH GPS ANTENNA

Our low-profile ANT-GPS-A active GPS antenna developed by AAC SpaceQuest provides hemispherical coverage and a built-in Low Noise Amplified (LNA). This antenna is ideal for MicroSats and SmallSats but can also be mounted recessed on CubeSats. The ANT-GPS-A is a space-qualified L-band patch antenna tuned to GPS frequency bands. The units have over 15 years of successful on-orbit flight operations heritage on our AAC SpaceQuest spacecraft as well as being deployed for a global clientele.

## KEY HIGHLIGHTS:

- Tuned to L1 GPS Band (Multi-channel models also available as part of our ANT-GPS Series)
- Built in 33dB LNA
- Hemispherical Radiation Pattern
- Low Axial Ratio and VSWR
- Space Qualified with more than 18 in Operation on Orbit
- Powered from GPS Receiver through RF Cable



### LOW PROFILE DESIGN

The ANT GPS units are all low-profile by design. The modular GPS antenna have versatile cable connection points to allow for ease of integration within the bus.



### FLEXIBLE CONFIGURATION

The frequency band and constellation on these units can be configured to match the GNSS receiver selected. From single frequency to multi-frequency, multi-constellation.



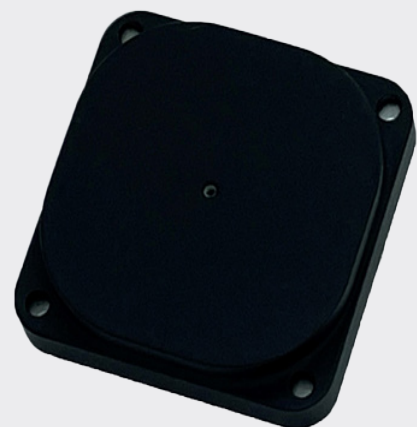
### HERITAGE

With over 15 years of on-orbit heritage these units have been developed to adapt to the ever-evolving constellations and associated frequencies.

# TECHNICAL SPECIFICATIONS

Performance Specifications			
Frequency:	L1, 1575.42 ±12 MHz (Muilt-Channel GPS Antenna Models Also Available)		
Radiation Pattern:	Hemispherical		
Polarization:	RHCP		
LNA Gain:	33 dB		
Axial Ratio:	2 dB		
VSWR:	<1.5:1		
Antenna Gain (dBic):		Free Space	Ground Plane
	90° Zenith:	+5.0	+2.5
	60° Elevation:	+4.2	+2.5
	30° Elevation:	+0.7	+1.6
	20° Elevation:	-0.9	-0.5
	10° Elevation:	-2.3	-2.9
LNA Noise Figure:	2.4 dB		
DC Grounding:	Yes		
Connector:	SMA Female		
Output Impedance:	50 Ohms		

Mechanical Specifications	
Mass:	80 grams
Size (incl. connector):	21.03 mm x 50.8 mm x 50.8 mm
Enclosure:	6061-T6 Aluminum Base with Composite Radome
Operating Temperature:	-55°C to +85°C



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

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