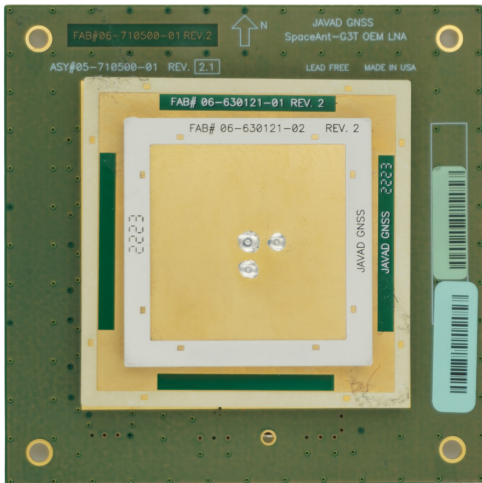![JAVAD logo]

SpaceAnt

OEM GNSS Antenna

Key Features

- All GNSS Constellations
- Extended Operating Temperature
- L-Band Tracking

- Stable Phase Center
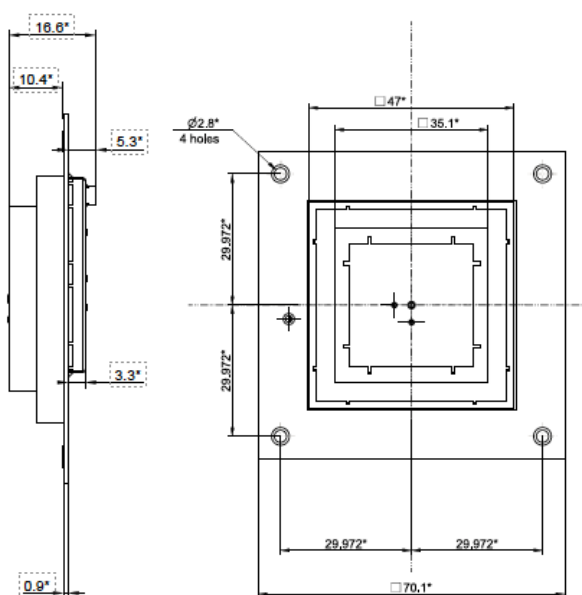- Zenith to Horizon Tracking
- Out-of-Band Rejection

SpaceAnt is a wide-band OEM GNSS antenna designed for reliable signal tracking of GPS, GLONASS, Galileo, BeiDou, NavIC, QZSS, and SBAS frequencies, as well as L-Band. This antenna features a stable phase center with enhanced signal reception and is usable for single, dual, and triple frequency applications. The compact and robust design allows flexibility, performance, and easy integration in the LEO satellite environment.

SpaceAnt complements our space-hardened TR-2S LEO receiver to create a complete OEM solution on small satellites.

SpaceAnt Specifications

GNSS Constellations	Constellation	Channels	Gain*, dB	Channels	Gain*, dB
	GPS	L1	5	L2/L5	4
	GLONASS	L1		L2/L3	
	Galileo	E1		E5A/E5B	
	BeiDou	B1/B1C		B2A/B2B	
	QZSS	L1		L1/L2	
	SBAS	L1		L5	
	NavIC	L1		L5	
	L-Band	1525-1559 MHz			

Out-of-Band Rejection	1165-1254 MHz 1520-1610 MHz	>50 dB @ 1000 MHz, >25 dB @ 1300 MHz >30 dB @ 1400 MHz, >20 dB @ 1462 MHz, >10 dB @ 1480 MHz >10 dB @ 1690 MHz, >30 dB @ 1710 MHz, >45 dB @ 1800 MHz

Electrical	Axial Ratio Output	3.0 dB max.
	Impedance	50 Ohm
	VSWR Max	2.0:1
	LNA Gain	32 ± 2 dB
	Noise Figure	1.7 dB typical

Power	Input	+3.6 to +5.5 VDC
	Current	100 mA typical
	Power Consumption	0.68 W max.

Physical	Dimensions	70.1 mm x 70.1 mm x 16.6 mm
	Weight	62 g

Environmental	Operating Temperature	-45°C to +85° C
	Storage Temperature	-50°C to +85°C
	Shock & Vibration	MIL-STD-810H Method 516.8 Functional Procedure I MIL-STD-810H Method 514.8 Procedure I, Category 4

* Typical at zenith.

Detailed Dimensions & Mounting Points

GNSS performance is dependent on signal quality, satellite geometry, ionospheric and tropospheric conditions, baseline length, multipath effects and RF interference. Specifications may be changed without notice.