



# Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna (4.2"x2.2"x0.7"), Glass/Back Mount, P/N: S4.2GIR1516RR-AP-GST-X



ISO 9001:2008/FAA Approved Facility

Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

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**IRIDIUM**

GPS: SMA Female (J2, Blue) NAMEPLATE Iridium: TNC Female (J1, Red)  
**(+2.5 to +30) Volts DC**

CONFIGURATION:	FREQ. BAND:	GPS/IRIDIUM/N/A:	MOUNTING:	GPS/IRIDIUM/CONNECTOR:	COLOR:
1: 2" SQ. (FLAT)	1516:L1 GPS & IRIDIUM	A: WITH LNA	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	1216:L1/L2 GPS	P: WITHOUT LNA	MIN: Flush Mag. Mount	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	GPS & IRIDIUM	G: GLASS MOUNT	N: N; NB: N-Bulkhead	-3: OLIVED RAB GREEN #34031 PER FED-STD-595B	
3: 3.5" DIA. (FLAT)		A2: WITH 20dB LNA	R: RIGHT ANGLE CON.	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)			GMN: GLASS/Flush Mag. Mount		
53: (HELIX ROD)					
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					
4.2: 4.2inx 2.2inx Flat					

**P/N: S4.2G1516RR-AP-GST-X**

NOTES: UNLESS OTHERWISE SPECIFIED:  
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS (mm)  
2. ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

**SPECIFICATIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED

**ELECTRICAL:**

	IRIDIUM	GPS
FREQUENCY:	(1610.0 - 1626.5) MHz	L1: (1575.42 ±13)
RADIATION PATTERN:	HEMISPHERICAL	HEMISPHERICAL
POLARIZATION:	RHCP	RHCP
VSWR:	< 1.5:1	< 1.5:1
GAIN (dB):	4 ft G.P.	Free Space F.S.
@ 90° (Zenith):	+4.9	+5.0
@ 10° Elevation:	-1.0	-2.5
@ 20° Elevation:	+1.5	-0.5
@ 30° Elevation:	+2.4	+1.0
@ 60° to 90° Elevation:	>+3.3	>+2.7
BEAM WIDTH (3dB):	129 °	98 °-106 °
AXIAL RATIO @ Zenith:	2 dB	2 dB
POWER HANDLING:	30 W	1 Watt
LIGHTNING PROTECTION:	DC GROUNDING	DC GROUNDING
FILTER (REJ. @1616 MHz):		> 60 dB
LNA GAIN:	N/A	(33.0+/-1.0) dB, 20dB (-A2- Option)
LNA P 1dB Out:	N/A	+16 dBm
LNA NOISE FIGURE:	N/A	2.8 dB (Filter loss is Included)
VOLTAGE/CURRENT:	N/A	(+2.8 TO +28) Volts DC / (30 TO 50) mA

**MECHANICAL:**

SIZE: WIDTH: 2.21 in. [56 mm], LENGTH: 4.15 in [106 mm], HEIGHT: 0.72 in. [18 mm]  
WEIGHT: 7.84 oz. (222 g)  
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL, AND NICKEL PLATING  
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, AND SKYDROL RESISTANCE, FIRE RETARDANT  
CONNECTOR: IRIDIUM: TNC FEMALE (J1, Red); GPS: SMA FEMALE (J2, Blue) (OPTIONAL: SMA, TNC, MCX, MMCX, N OR CABLE)  
MOUNTING: GLASS/ FLAT FIXED BACK MOUNT with O-RING

**ENVIRONMENTAL:**

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]  
ALTITUDE: 70,000ft.  
VIBRATION: > 30 G's  
LEAKAGE: HERMETICALLY SEALED

**FEDERAL & MILITARY SPECIFICATIONS**

DESIGN TO: FAA TSO-C144, DO-160D, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

QUANTITY REQD	DESCRIPTION	PART NO	MATERIAL	FINISH	REV NO
1	O-RING	2-038-N756-75			1

**ANTCOM CORP.** TORRANCE CALIFORNIA  
(4.2 x 2.2 x 0.7) in Glass/Back Mount GPS/IRIDIUM ANTENNA  
S. HUYNH April-27-07  
3CVE1 S4.2GIR1516RR-AP-GST-1  
SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas