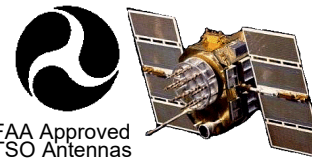




**Active L1/L2 GPS & (IRIDIUM/Inmarsat) Antenna, P/N: S5GIR1216RR-AP-XST-X**  
**P/N: S5GIR1216RR-AP-XST-1-HF (with Higher Iridium Rejection Filters)**  
 (5.03"x2.08"x0.69"), Flat or Pipe mount



ISO 9001:2008/FAA Approved Facility Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

ANTCOM CORPORATION . 367 Van Ness Way, #602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: [antennas@antcom.com](mailto:antennas@antcom.com) . <http://www.antcom.com>

**MECHANICAL:**

SIZE: WIDTH: 2.214 in. [56.24 mm], LENGTH: 5.040 in [128.02 mm], HEIGHT: 0.745 in. MAX. [18.92 mm] MAX.  
 WEIGHT: 8.59 oz. (244 g)  
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441F  
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, AND SKYDROL RESISTANCE, FIRE RETARDANT  
 CONNECTOR: GPS: SMA FEMALE, IRIDIUM: TNC FEMALE (OPTION: SMA, TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, or Cable)  
 MOUNTING: FLAT FIXED MOUNT; O-RING & 4 x 10-32 MOUNTING SCREWS PROVIDED

**ENVIRONMENTAL:**

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]  
 ALTITUDE: 70,000 ft.  
 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

**SPECIFICATIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
A		UPDATE HEIGHT	05-12-17	S.H.
B		HEIGHT		

ELECTRICAL:		IRIDIUM		L1 OR L1/L2 GPS		
FREQUENCY:	(1610.0 - 1626.5) MHz	L1: (1575.42 ±13) MHz	L2: (1227.60 ±13) MHz			
RADIATION PATTERN:	HEMISPHERICAL	HEMISPHERICAL				
POLARIZATION:	RHCP	RHCP				
VSWR:	< 1.5:1	< 1.5:1				
GAIN (dB):	4 ft G.P.	Free Space	F.S.	4 ft G.P.	F.S.	4 ft G.P.
@ 90° (Zenith):	+4.9	+5.0	+4.6	+2.9	+1.8	+5.3
@ 10° Elevation:	-1.0	-2.5	-2.5	-1.8	-4.2	-2.3
@ 20° Elevation:	+1.5	-0.5	-1.1	+0.7	-2.9	+0.4
@ 30° Elevation:	+2.4	+1.0	+0.5	+1.7	-2.0	+2.3
@ 60° to 90° Elevation:	>+3.3	>+2.7	> 3.6	> 2.1	> 0.9	> 3.2
BEAM WIDTH (3dB):	129 °	98 °-106 °	103 °	146 °	108 °	74 °
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				
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				

QTY	DESCRIPTION	PART NO	MATERIAL	FINISH	TRM NO
4	MOUNTING SCREW: (10-32, 1")	MS24693C276	-	-	5
1	ADHESIVE GASKET	12345G-3M-4G	-	-	3
1	O-RING	2-038-N756-75	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE 16ths UNLESS NOTED OTHERWISE ANGLES ± 1/64 DECIMALS ± .015 .0016 ± .005	ORIGINAL DRAWN: S. HUYNH Dec-13-02	ANTCOM CORP. TORRANCE, CALIFORNIA
TOLERANCE .5M PER ANS Y14.5	ORIGINAL DESIGNED: S. HUYNH Dec-13-02	<b>ANTCOM CORP.</b> FLAT FIXED MOUNT ACTIVE IRIDIUM/L1/L2 GPS ANTENNA
HEMIC ALL SURFACES BREAK EXTERNAL EDGES .001 TO .010 FILE TO .0015	UPDATED: S. HUYNH May-12-17	
SIZE 9 SURFACES PER MIL-C-8878 DAY'S ON A COARSE 1/2" DIA	UPDATE DRAWN: S. HUYNH May-12-17	
MACHINED SURFACES 1/2"	APPROVED: S. HUYNH May-12-17	
DO NOT SCALE DRAWING	SCALE 1/1	SHEET 1 OF 1

**CON-FIGURATION:** 1: 2" SQ. (FLAT) 1.8" 1.9" SQ. (FLAT) 2: 2.8" DIA. (FLAT) GPS & IRIDIUM 3: 3.5" DIA. (FLAT) 4: MINI ARINC (FLAT) 53: (HELIX ROD) 5B: (HELIX BLADE) 3D: (HELIX HANDHELD)

**FREQ. BAND:** 1516; L1 GPS & IRIDIUM 1216; L1/L2 GPS GPS & IRIDIUM

**GPS/IRIDIUM LNA:** A: WITH LNA P: WITHOUT LNA

**CABLE'S LENGTH:** X: NO CABLE Y: WITH MAG. MOUNT #: CABLE LENGTH (IN) R: RIGHT ANGLE CON.

**GPS/IRIDIUM CONNECTOR:** S: SMA; P: PINS M: MCX; MM: MMCX N: N; NB: N-Bulkhead T: TNC; TB: TNC-Bulkhead

**COLOR:** -1: GLOSS WHITE #17925 PER FED-STD-595B -2: LUSTERLESS GRAY #36320 PER FED-STD-595B -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B -4: LUSTERLESS BLACK #37038 PER FED-STD-595B

**DATE STAMP/ NAMEPLATE** Iridium: TNC Female (OPTION: SMA, N, MCX)

**GPS: SMA Female (OPTION: TNC, N, MCX) (+2.5 to +30) Volts DC**

**P/N: S5GIR1216RR-AP-XST-X**

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

NMO Connector Option is Now Available for Some Antennas