



FAA Approved Facility

# L1/L2 GPS/RHCP-Inmarsat/Iridium Antenna, P/N: 3G1216P-XTBC-X Rev A or LHCP-Thuraya only Antenna, P/N: 3T1516P-XTBC-X Rev A 3.5" Diameter, Flat, Front/Back Mount, Center Connector Configurations

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



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**SPECIFICATIONS**

ZONE	REV	REVISIONS		
		DESCRIPTION	DATE	APPROVED
A		ADDED CENTER CONNECTOR	10-02-12	S.H

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**ELECTRICAL:**

	L1/L2 GPS		Rx/Tx INMARSAT/GLONASS/IRIDIUM	
	L1: (1575.42 ±12)	L2: (1227.60 ±12)	(1542.50 ±17.5)	(1602-1626)
FREQUENCY (MHz):	Free Space	4 ft G.P.	Free Space	4 ft G.P.
ANTENNA GAIN (dBi):				
@ 90 ° (ZENITH):	+ 5.5	+ 4.5	+ 3.8	+ 4.9
@ 10 ° Elevation:	- 1.2	- 1.4	- 3.8	- 3.6
@ 20 ° Elevation:	+ 0.3	+ 1.4	- 2.0	- 0.1
@ 30 ° Elevation:	+ 1.8	+ 2.2	- 0.5	- 1.8
@ 60 - 90 ° Elevation:	> 4.8	> 3.8	> 2.7	> 3.0
BEAM WIDTH (3dB):	106 Deg.	130 Deg.	106 Deg.	75 Deg.
HEMISPHERICAL				
POLARIZATION:	RHCP			
VSWR:	< 1.5:1			
IMPEDANCE:	50 ohms			
AXIAL RATIO:	2 dB			
LIGHTNING PROTECTION:	DC GROUNDING			
<b>LNA OPTION:</b>				
LNA GAIN:	35 dB			
LNA NOISE FIGURE:	3.0 dB			
LNA P1dB Out:	+13 dBm			
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA			
REJECTION @ (-50/+50) MHz:	-40 dB / -40 dB			
@ (-100/+100) MHz:	< -65 dB			
POWER HANDLING:	200 Watts CW (WITHOUT LNA) , 1 Watt CW (WITH LNA)			

MECHANICAL:

**SIZE:** DIAMETER: 3.515 in. [ 89.28 mm]  
HEIGHT: 0.812 in. [20.62 mm], .654 in. [16.61 mm] (No Radome option)  
5.15 oz. (.146 Kg)

**WEIGHT:**

**FINISH:** SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5441

**MATERIAL:** 6061-T6 ALUMINUM ALLOY BASE  
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT

**CONNECTOR:** SMA FEMALE  
(OPTION: TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, or Cable)

**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, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

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QTY	DESCRIPTION	PART NO	MATERIAL	FINISH	TEST
4	MOUNTING SCREWS: 4-40, 3/4"	MS24693-C	-	-	3
4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-	-	2
1	O-RING	2-031/N756-75	-	-	1
-2					

  

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TO DECIMALS ANGLES ± 1/64 .001 .005 ± 1°	ORIGINAL DESIGNED	S. HUYNH	DATE	Oct-29-03
TOLERANCE SURF PER ANSI Y14.5	UPDATED	S. HUYNH <td>DATE <td>Oct-02-12 </td></td>	DATE <td>Oct-02-12 </td>	Oct-02-12
RELIEF ALL SHARP	UPDATE DRAWN	P. TRIAN <td>DATE <td>Oct-02-12 </td></td>	DATE <td>Oct-02-12 </td>	Oct-02-12
BREAK EXTERNAL EDGES .005 TO .015	APPROVED	S. HUYNH <td>DATE <td>Oct-02-12 </td></td>	DATE <td>Oct-02-12 </td>	Oct-02-12
FILED & DIMS TO 6 DEC				
SCREW THREADS PER MIL-S-8879				
DATE ON A COMBINE 1/27/00				
MACHINED SURFACES 1/27/00				
DO NOT SCALE DRAWING				

**ANTCOM CORP.** TORRANCE, CALIFORNIA

3.5" Dia. L1/L2 GPS/INMARSAT/GLONASS/IRIDIUM ANTENNA

REV: 001 DATE: 10/02/12

3G1216P-XTBC-X [A]

SCALE: 1/1 SHEET 1 OF 1

**CONFIGURATION:** LNA: 1: 2" SQ. (FLAT) 1215: L1/L2 1.8: 1.5" SQ. (FLAT) 1511: ONLY 2: 2.6" DIA. (FLAT) 16: L1/L2 & P: WITHOUT LNA 3: 3.5" DIA. (FLAT) RX/TX INMARSAT GLONASS/IRIDIUM 4: MINI ARINC (FLAT) 53: (HELIX ROD) 59: (HELIX BLADE) 52: (HELIX HANDHELD)

**FREQ. BAND:** 1215: L1/L2 1511: ONLY

**CABLE'S LENGTH:** X: NO CABLE Y: 1FT+ MAG. MOUNT N: N: NB: N Bulkhead R: RIGHT ANGLE COM. T: TNC; TB: TNC-Bulkhead

**CONNECTOR:** S: SMA; P: P/FMS

**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

**CONNECTIONS:** 1: 2" SQ. (FLAT) 1215: L1/L2 1.8: 1.5" SQ. (FLAT) 1511: ONLY 2: 2.6" DIA. (FLAT) 16: L1/L2 & P: WITHOUT LNA 3: 3.5" DIA. (FLAT) RX/TX INMARSAT GLONASS/IRIDIUM 4: MINI ARINC (FLAT) 53: (HELIX ROD) 59: (HELIX BLADE) 52: (HELIX HANDHELD)

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NMO Connector is Now Available for Some Antennas