



FAA Approved Facility

Hermetically Sealed, Ruggedized and High Vibration/Shock Resistant Active GPS/Glonass Antenna

P/N: 1.3G1215A2-4.5NMM-4-SO6 (L1/L2), P/N: 1.3G15A2-4.5NMM-4-SO6 (L1)

L1/Inmarsat/Iridium: P/N: 1.3GL1RxINA2-4.5NMM-4-SO6 (Active Rx only), P/N: 1.3GL1RxINP-4.5NMM-4-SO6 (Passive Tx/Rx)

Other Frequency Bands are also Available

Top or Back Mount, Side Cable Configuration with O-Ring

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



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**SPECIFICATIONS**

REVISIONS			
ZONE	REV	DESCRIPTION	DATE
-	-	-	-

**ELECTRICAL:**

	L1 GPS: 1575.42 ± 15.0 MHz	L2 GPS: 1227.60 ± 12 MHz	L1 GLONASS: 1598 - 1609 MHz	L2 GLONASS: 1242 - 1252 MHz
FREQUENCY:				
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	RHCP			
VSWR:	< 2.0:1		< 2.0:1	
IMPEDANCE:	50 ohms		50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	Free Space	3 in G.P.
@ 90 ° (ZENITH):	+ 0.4	+ 3.2	- 2.2	+ 0.0
@ 10 ° Elevation:	- 4.6	- 4.1	- 10.6	- 4.4
@ 15 ° Elevation:	- 4.5	- 3.8	- 8.5	- 3.5
@ 20 ° Elevation:	- 4.5	- 3.5	- 6.3	- 2.5
@ 30 ° Elevation:	- 3.3	- 1.8	- 4.0	- 1.7
@ 40 ° Elevation:	- 2.5	- 0.6	- 3.3	- 1.6
@ 50 ° Elevation:	- 2.0	+ 0.5	- 3.3	- 1.5
@ 60 ° Elevation:	- 1.5	+ 1.5	- 3.3	- 0.9
@ 70 ° Elevation:	- 0.7	+ 2.4	- 3.2	- 0.4
@ 80 ° Elevation:	+ 0.1	+ 3.0	- 3.2	- 0.1
BEAM WIDTH (3dB):	100 Deg.	80 Deg.	100 Deg.	140 Deg.
AXIAL RATIO:	1.0 dB		3.0 dB	
LIGHTNING PROTECTION:	DC GROUNDING			

**LNA OPTION:**

LNA GAIN: 24.0 dB (Option 43 dB)  
 LNA NOISE FIGURE: 1.8 dB  
 LNA P 1dB Out: +10 dBm  
 VOLTAGE/CURRENT: (+2.8 TO +28) Volts DC / (15 TO 25) mA

**MECHANICAL:**

SIZE: 1.320 in. [33.53 mm] SQ.  
 HEIGHT: .692 in [17.58 mm]  
 WEIGHT: 1.3 oz. (36.8 g)  
 FINISH: BASE: HARD BLACK ANODIZE PER MIL-A-8625F, TYPE III, CLASS 2  
 RADOME: SKYDROL RESISTANT POLYURETHANE ENAMEL PER FED-STD-595B  
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
 COMPOSITE RADOME, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT  
 CONNECTOR: 4.5IN. FLEXIBLE CABLE WITH MMCX CONNECTOR (OPTION: QMA, TNC, SMB, SSMA, SSMB, SSMC, SSMP, MCX, MMCX, OR SMP)

**ENVIRONMENTAL:**

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

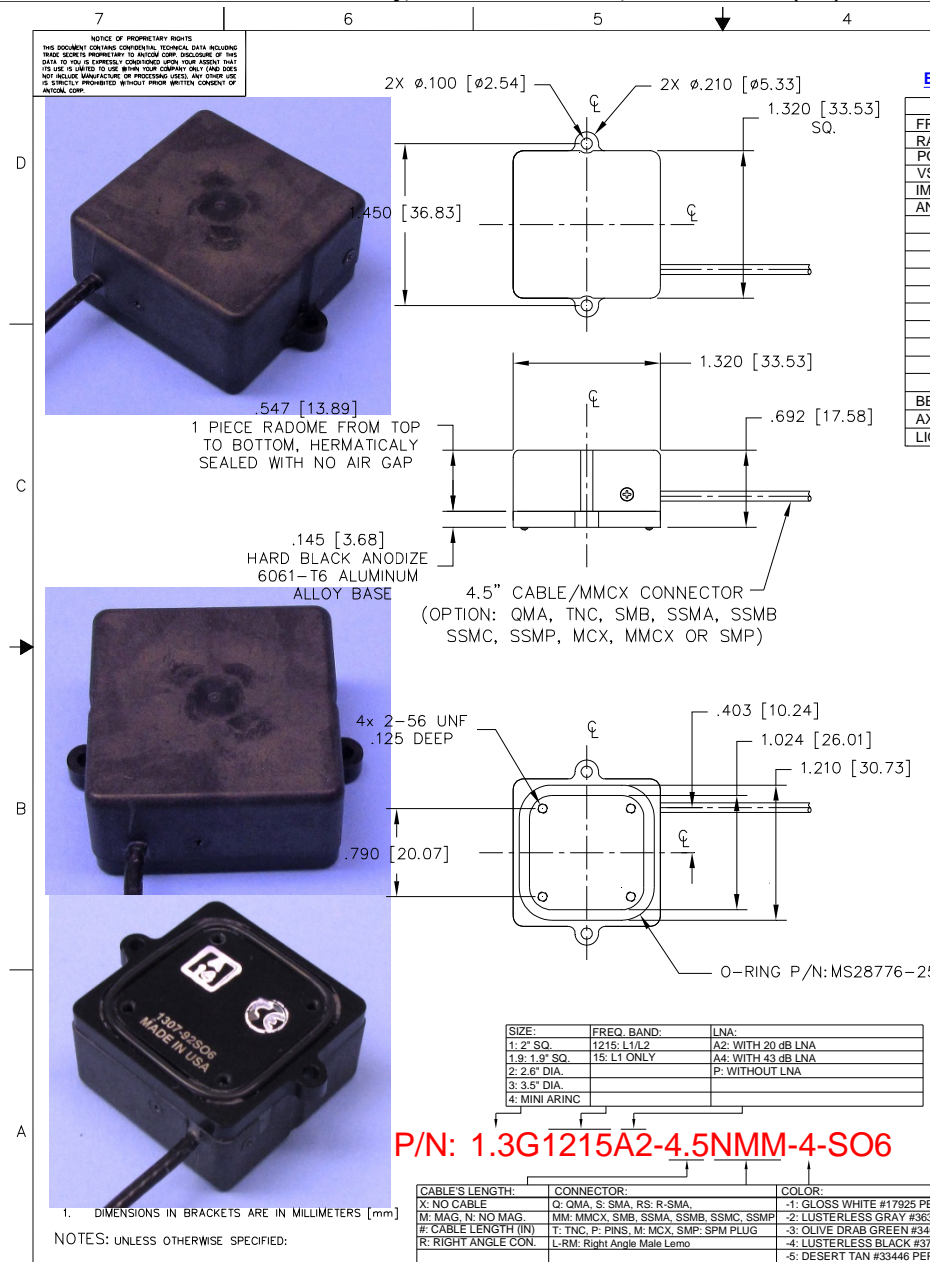
**FEDERAL & MILITARY SPECIFICATIONS:**

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

1	0-RING	MS28776-25	-	-	-	1
-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH
QUANTITY REQD PARTS LIST						
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE ANGLES ± 1/64 .001 .005 ± .1						
TOLERANCE .001 PER ANSI Y14.5						
REMOVE ALL BURRS BREAK IN INTERNAL EDGES .005 TO .010 FILE IN .005 TO .010 SQUARE WEEDS TO .005 .005 DATA ON A COMMON & .005 MACHINED SURFACES						
DO NOT SCALE DRAWING						
ORIGINAL DRAWN S. HUYNH Mar-11-05		ANTCOM CORP. TORRANCE, CALIFORNIA				
ORIGINAL DESIGNED S. HUYNH Mar-11-05		HERMETICALLY SEALED ACTIVE L1/L2 GPS/GLONASS ANTENNA				
UPDATED S. HUYNH Jun-08-12		SCALE 1/1				
UPDATE DRAWN P. TRAN Jun-08-12		SHEET 1 OF 1				
APPROVED S. HUYNH Jun-08-12		D 3CVE1 1.3G1215A2-4.5NMM-4-SO6				



P/N: 1.3G1215A2-4.5NMM-4-SO6

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215: L1/L2	A2: WITH 20 dB LNA
1.9: 1.9" SQ.	15: L1 ONLY	A4: WITH 43 dB LNA
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		
4: MINI ARINC		

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	Q: QMA, S: SMA, RS: R-SMA,	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N: NO MAG.	MM: MMCX, SMB, SSMA, SSMB, SSMC, SSMP	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
IF: CABLE LENGTH (IN)	T: TNC, P: PINS, M: MCX, SMP: SMP PLUG	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	L:RM: Right Angle Male Lemo	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: DESERT TAN #33446 PER FED-STD-595B

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]  
 NOTES: UNLESS OTHERWISE SPECIFIED:

NMO Connector Option is Now Available for Some Antennas