



FAA Approved Facility

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

P/N: 1.3G1215A2-XSM-4-FC (L1/L2), P/N: 1.3G15A2-XSM-4-FC (L1)

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

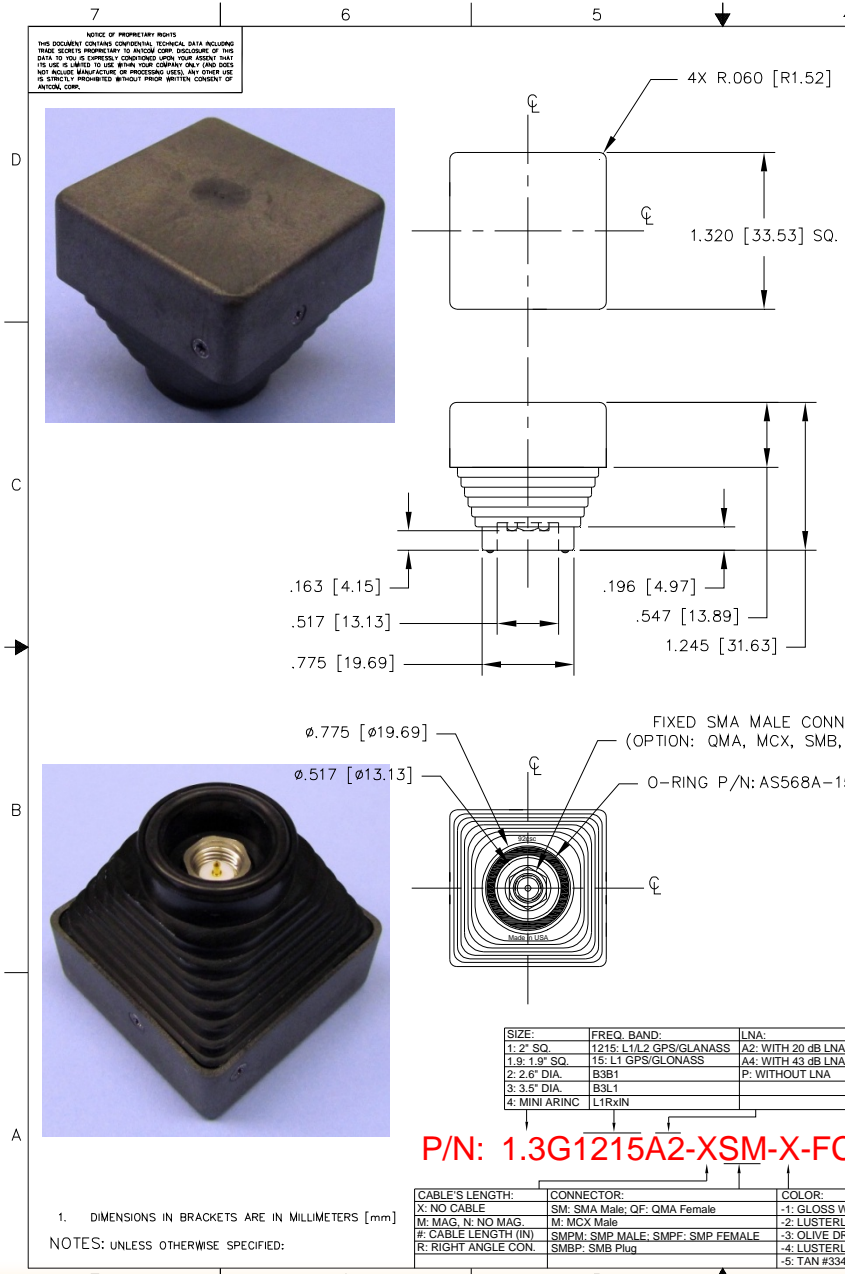
Other Frequency Bands are also Available

Top Mount Configuration with O-Ring

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



ANTCOM CORPORATION . 367 Van Ness Way, Suite 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>



**SPECIFICATIONS**

**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 dB  
 VOLTAGE/CURRENT: (+2.8 TO +28) Volts DC / (15 TO 25) mA

**MECHANICAL:**

SIZE: 1.320 in. [33.53 mm] SQ.  
 HEIGHT: 1.245 in. [31.63 mm]  
 WEIGHT: 1.82 oz. (51.6 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:**

FIXED SMA MALE  
 (OPTION: QMA, MCX, SMB, OR SMP)

**ENVIRONMENTAL:**

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]  
 ALTITUDE: 70,000 ft.  
 VIBRATION: - 20K G's  
 LEAKAGE: HERMETICALLY SEAL

**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

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

1	2	3	4	5	6	7
1	O-RING	AS568A-15	-	-	-	1
-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH
QUANTITY REQD						ITEM NO
			PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 .005 .006 ± .01		TOLERANCE SWM PER ANSI #14.5		ANTCOM CORP. TORRANCE CALIFORNIA		
REMOVE ALL BURRS FROM ALL EDGES .005 TO .015 SIZE W/ FINISHES PER MIL-S-8879 DYES ON A CONFORM TO #2,005 MACHINED SURFACES 2/		DO NOT SCALE DRAWING		GPS/Satcom ANTENNA		
ORIGINAL DRAWN	S. HUYNH	ORIGINAL DESIGNED	S. HUYNH	DATE: Mar-11-05		
UPDATED	S. HUYNH	DATE: Dec-05-12				
UPDATE DRAWN	P. Tron	DATE: Dec-05-12				
APPROVED	S. HUYNH	DATE: Dec-05-12				
DATE	DESIGNED BY	DRAWN BY		CHECKED BY		
D	3CVE1	1.3G1215A2-XSM-X-FC		REV		
SCALE 1/1		SHEET 1 OF 1				

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NMO Connector Option is Now Available for Some Antennas