



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.** Fully Sealed and Potted with No Air Cavity Inside

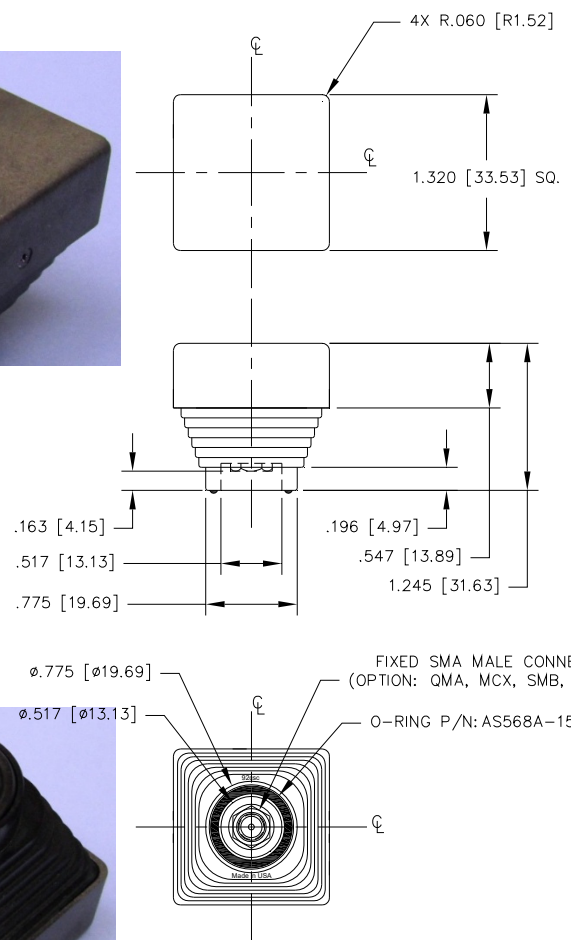
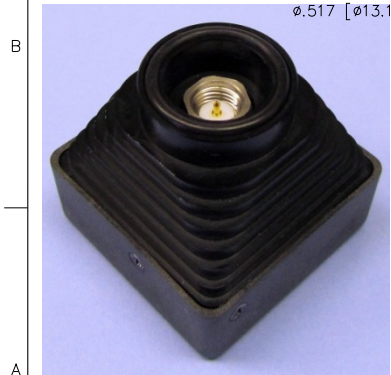
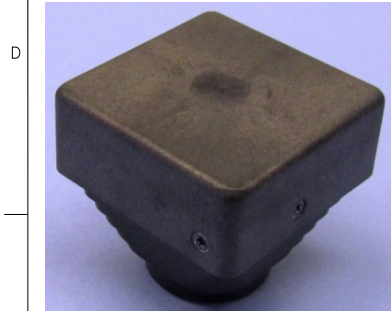
Gooseneck and Other Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

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 . <http://www.antcom.com>

NOTICE OF PROPRIETARY RIGHTS
THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY PROHIBITED UNLESS YOU AGREE THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY (AND DOES NOT INCLUDE MANUFACTURE OR PROCESSING THEREOF). ANY OTHER USE IS EXPRESSLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.



SPECIFICATIONS

ELECTRICAL:

		REVISIONS			
ZONE	REV	DESCRIPTION	DATE	REVISED	APPROVED
-	-	-	-	-	-

FREQUENCY:	L1 GPS: 1575.42 ± 15.0 MHz	L2 GPS: 1227.60 ± 12 MHz		
RADIATION PATTERN:	L1 GLONASS: 1598 - 1609 MHz	L2 GLONASS: 1242 - 1252 MHz		
POLARIZATION:	HEMISPHERICAL			
VSWR:	RHCP			
IMPEDANCE:	< 2.0:1			
ANTENNA GAIN (dBic):	Free Space	3 in G.P.		
	50 ohms	50 ohms		
	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]
1.82 oz. (51.6 g)
WEIGHT:
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, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215: L1/L2 GPS/GLONASS	A2: WITH 20 dB LNA
1.9: 1.9" SQ.	15: L1 GPS/GLONASS	A4: WITH 43 dB LNA
2: 2.6" DIA.	B3B1	P: WITHOUT LNA
3: 3.5" DIA.	B3L1	
4: MINI ARINC	L1RxIN	

P/N: 1.3G1215A2-XSM-X-FC

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	SM: SMA Male; QF: QMA Female	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N; NO MAG.	M: MCX Male	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	SMPM: SMP MALE; SMPF: SMP FEMALE	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	SMBP: SMB Plug	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: TAN #33446 PER FED-STD-595B

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

1	O-RING	AS568A-15	-	-	-	1	
-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	
QUANTITY REQD	REV	PARTS LIST					REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TO DECIMALS ARE ± 1/64 TOLERANCES ARE: ANGLES ± 1°							
TOLERANCE SMA PER ANS I14.8							
REMOVE ALL BURRS							
BREAK EXTERNAL EDGES TO 0.010							
SALES TO 0.015 IN DIA							
DATE ON A COMMON 0.25000							
MACHINED SURFACES							
DO NOT SCALE DRAWING							
ANTCOM CORP. TORRANCE CALIFORNIA		GPS/Satcom ANTENNA		D 3CVE1 1.3G1215A2-XSM-X-FC			
SCALE 1/1		SHEET 1 OF 1					

NMO Connector Option is Now Available for Some Antennas