



FAA Approved Facility

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

P/N: 1.3G1215A2-4.5MM-4-SO (L1/L2), P/N: 1.3G15A2-4.5MM-4-SO (L1)

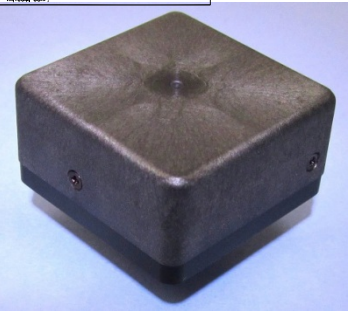
L1/Inmarsat/Iridium: P/N: 1.3GL1RxINA2-4.5MM-4-SO (Active Rx only), P/N: 1.3GL1RxINP-4.5MM-4-SO (Passive Tx/Rx)

Other Frequency Bands are also Available
Back Mount, Bottom Cable Configuration with O-Ring

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

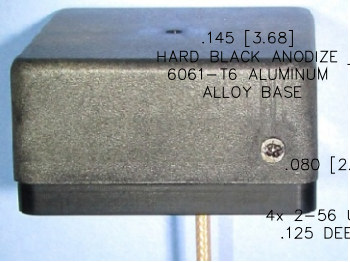


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1. 1 PIECE RADOME FROM TOP TO BOTTOM, HERMETICALLY SEALED WITH NO AIR GAP

.547 [13.89]




HARD BLACK ANODIZE
6061-T6 ALUMINUM
ALLOY BASE

.145 [3.68]

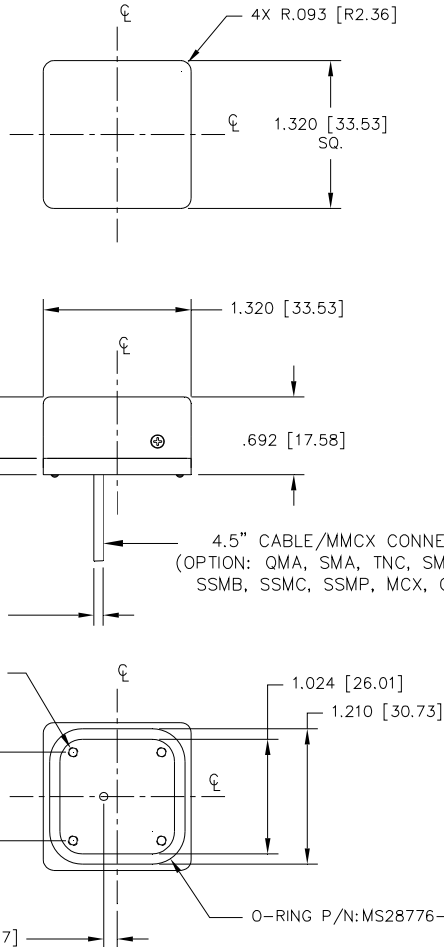
080 [2.03]

4x Z-56 UNF
.125 DEEP



1212-92SO
MADE IN USA

21 [3.07]



4X R.093 [R2.36]

1.320 [33.53] SQ.

.692 [17.58]

4.5" CABLE/MMCX CONNECTOR
(OPTION: QMA, SMA, TNC, SMB, SSMA, SSMB, SSMC, SSMP, MCX, OR SMP)

1.024 [26.01]

1.210 [30.73]

.790 [20.07]

O-RING P/N: MS28776-25

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 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: 1.9 oz. (53.9 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: 4.5" FLEXIBLE CABLE WITH MMCX CONNECTOR (OPTION: QMA, SMA, TNC, SMB, SSMA, SSMB, SSMC, SSMP, MCX, 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

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		

P/N: 1.3G1215A2-4.5MM-4-SO

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
#: CABLE LENGTH (IN)	T: TNC, P: PINS, M: MCX, SMP: SPM 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	0-RING	MS28776-25	-	-	-	1
QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV
						NEW

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS AND ANGLES ± 1/64 ± .015 ± .1

TOLERANCE SURF PER ANSI Y14.6

REMOVE ALL BURRS

BREAK EXTERNAL EDGES .005 TO .015

FILL IN .015 TO .019

SCORE SURFACES PER MIL-S-8879

DATA ON A COMMON 2" X 2" GRID

MACHINED SURFACES

DO NOT SCALE DRAWING

ORIGINAL DRAWN S. HUYNH Mar-11-05

ORIGINAL DESIGNED S. HUYNH Mar-11-05

UPDATED S. HUYNH Dec-12-12

UPDATE DRAWN P. TRAY Dec-12-12

APPROVED S. HUYNH Dec-12-12

ANTCOM CORP. TORRANCE, CALIFORNIA

HERMETICALLY SEALED ACTIVE L1/L2 GPS/GLONASS ANTENNA

SCALE 1/1

SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas

CC: 3CVE1, NAICS: 334511, S.H, Jan-04-2013 <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf> (Amplifiers, Power Divider/Combiner, Filters, Diplexer)

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