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

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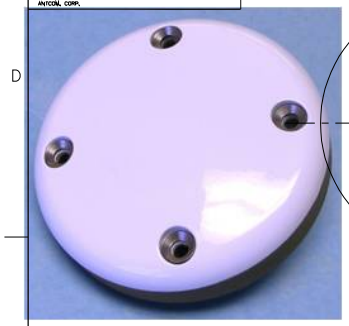

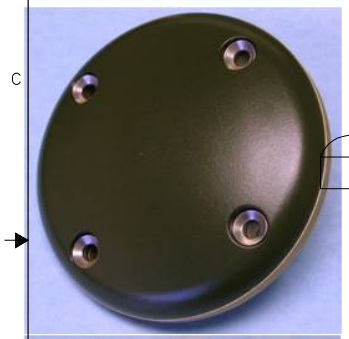

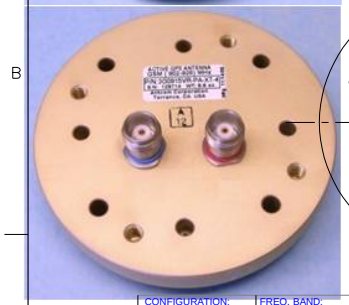

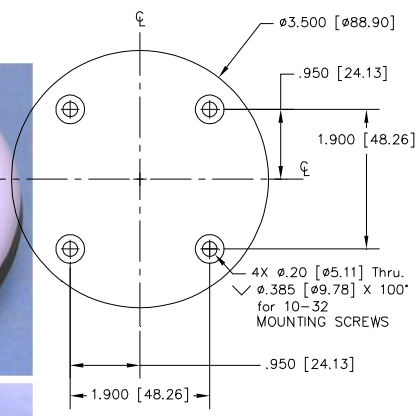

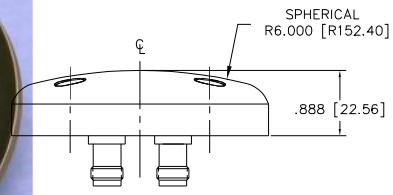

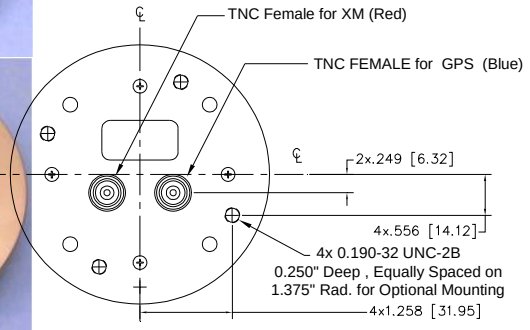

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz		L2: (1227.60 ±12) MHz		XM: (2338.75 +/- 10) MHz
RADIATION PATTERN:	HEMISPHERICAL				
POLARIZATION:	RHCP		RHCP		LHCP
VSWR:	< 2.0:1		< 2.0:1		< 2.0:1
IMPEDANCE:	50 ohms		50 ohms		50 ohms
ANTENNA GAIN (dBic):	Free Space	4 ft G.P.	Free Space	4 ft G.P.	4 ft G.P.
@ 90 ° (ZENITH):	+ 5.0	+ 3.1	+ 0.7	+ 4.5	+ 4.6
@ 10 ° Elevation:	- 2.1	- 1.9	- 5.8	- 3.5	- 1.1
@ 20 ° Elevation:	- 0.6	+ 0.6	- 4.3	- 0.8	+2.2
@ 30 ° Elevation:	+ 0.9	+ 1.7	- 3.4	+ 1.4	+2.2
@ 60 - 90 ° Elevation:	> 4.0	> 2.4	> - 0.9	> 2.2	—
BEAM WIDTH (3dB):	103 Deg.	143 Deg.	94 Deg.	74 Deg.	—
AXIAL RATIO:	2 dB		2 dB		2 dB
LIGHTNING PROTECTION:	DC GROUNDING				
LNA GAIN:	33 dB		35 dB		33 dB
LNA NOISE FIGURE:	2 dB		2 dB		2 dB
LNA P1dB Out:	+13 dBm		+13 dBm		+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA				
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)				

MECHANICAL:

SIZE:	DIAMETER: 3.50 in.[88.90 mm] HEIGHT: 0.888 in. [23 mm]
WEIGHT:	9.2 oz. (261g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541F
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	TNC FEMALE (OPTION: SMA, TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, SMP, BNC, 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:

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

CONFIGURATION:	FREQ. BAND:	GPS/WSI LNA:	CABLE'S LENGTH:	GPS/IRIDIUM/WSI CON.:	COLOR:
1: 2" SQ. (FLAT)	1625: Tx/Rx	A: WITH LNA	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	25: Rx ONLY	P: WITHOUT LNA	M: WITH MAG. MOUNT	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	16: Tx ONLY		#: CABLE LENGTH (IN)	N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA. (FLAT)	151623: L1L2 GPS/XM (SIRIUS)		R: RIGHT ANGLE CON.	T: TNC; TB: TNC- Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)	121523: L1/L2 GPS/IRIDIUM/XM				
5S: (HELIX ROD)	151615: GPS/IRIDIUM/WSI				
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					

P/N: 3G121523RL-AA-XTT-1

QUANTITY REQD		DESCRIPTION	PART NO	FINISH	ITEM NO
		PARTS LIST			
4		MONTING SCREWS: 10–32, 1", Item 579	J507C1032R16	–	3
4		WASHER, CUSTOM C'SINK	3G15P1001–6		2
1		GASKET	3G15P1001–3G	–	1

2. MOUNTING SCREWS & ADHESIVE GASKET ARE SUPPLIED BY ANTCOM
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES: FRACTIONS ± 1/64, DECIMALS .XX± .015, .XXX± .010, ANGLES ± 1°. TOLERANCE SYM PER ANSI Y14.5. REMOVE ALL BURRS. BREAK EXTERNAL EDGES .005 TO .015. FILLETS R .005 TO R .030. SCREW THREADS PER MIL-S-8879. DIA'S ON A COMMON Ø .005. MACHINED SURFACES 125. DO NOT SCALE DRAWING.

DRAWN | CHECKED | ENGINEER | APPROVED S. HUYNH Oct-24-11 | CAD FILE NO

ANTCOM CORP. TORRANCE, CALIFORNIA

3.5" Dia., Active L1L2-GPS & Active XM ANTENNA

SIZE D | CAGE NO 3CVE1 | DRAWING NO 3G121523RL-AA-XTT-1 | REV

SCALE 1/1 | SHEET 1 OF 1