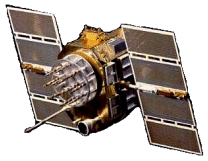

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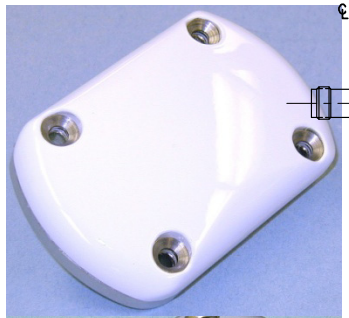
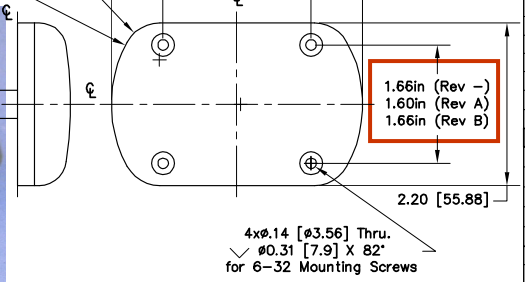
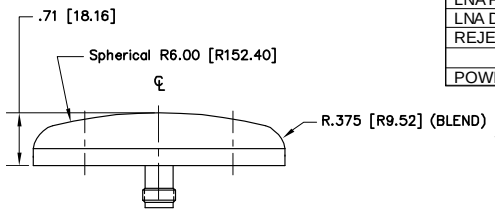
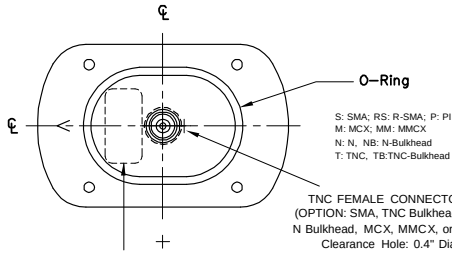








SPECIFICATIONS

ELECTRICAL:

	L1: (1575.42 ±12) MHz			L2: (1227.60 ±12) MHz		
FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP			RHCP		
VSWR:	< 2:1			< 2:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNAGAIN (dBic):	Free Space	16 in G.P.	4 ft G.P.	Free Space	16 in G.P.	4 ft G.P.
@ 90 ° (ZENITH):	+ 4.6	+ 0.3	+ 2.9	+ 1.8	+ 1.9	+ 5.3
@ 10 ° Elevation	- 2.5	- 3.1	- 1.8	- 4.2	- 3.1	- 2.3
@ 20 ° Elevation	- 1.1	- 1.1	+ 0.7	- 2.9	- 1.1	+ 0.4
@ 30 ° Elevation	+ 0.5	+ 0.9	+ 1.7	- 2.0	+ 0.5	+ 2.3
@ 60 - 90 ° Elevation:	> 3.6	+ 3.1/+ 0.3	> 2.1	> 0.9	+ 3.1/+ 1.9	> 3.2
BEAM WIDTH (3dB):	103 Deg.	120 Deg.	146 Deg.	108 Deg.	120 Deg.	74 Deg.
AXIAL RATIO	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING					
LNA GAIN:	33 dB			35 dB		
LNA NOISE FIGURE:	3.0 dB			3.0 dB		
LNA P1dB Out:	+13 dBm			+13 dBm		
LNA DC POWER:	2.5V/20mA,3V/29mA,3.3V/35mA,(2.5-24)V/<50mA					
REJECTION@ (-50/+50) MHz	-41 dB / -59 dB			-40 dB / -40 dB		
@ (-100/+100) MHz	< -65 dB			< -65 dB		
POWER HANDLING	1 Watt CW, Optional: 10 Watts 1 MicrosecPulse (-AL-)					

MECHANICAL:

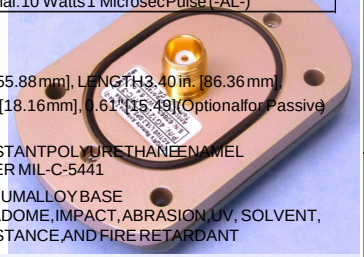
SIZE:	WIDTH: 2.20 in. [55.88 mm], LENGTH 3.40 in. [86.36 mm] HEIGHT: 0.72 in. [18.16mm], 0.61" [15.49] (Optional for Passive)
WEIGHT:	5.15 oz. (146 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	TNC FEMALE (OPTION: SMA, TNC Bulkhead, N, N Bulkhead MCX, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000ft.
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



QUANTITY REQD		DESCRIPTION	PART NO	FINISH	ITEM NO
		PARTS LIST			
4	–	MOUNTING SCREWS for –PL– ONLY: (6–32, 3/4")	91500A151	–	5
4	–	MOUNTING SCREW: (6–32, 1")	91500A153		4
				–	3
A/R	–				
1		O-RING	2-031/N756-75	–	1

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215: L1/L2	A: with +33dB LNA; A2: with 20 dB LNA A27: with +27 dB LNA
1.9: 1.9" SQ.	15: L1 ONLY	A4: with +40 dB LNA; AL: WITH LNA LIMITTER
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		PL: WITHOUT LNA and THINNER (HEIGHT= 0.61")
4: MINI ARINC		

Example of P/N: 4G1215A27-XTBC-3

CABLE'S LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA; RS: R-SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG., N: NO MAG.	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	N: N, NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TNC, TB:TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

2. O-RING, AND MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

REVISIONS			
ZONE REV	DESCRIPTION	DATE	APPROVED
–	1.66in Mounting Spacing	Jan-06-01	S.H
A	1.60in Mounting Spacing; VSWR: 2.0	Nov-11-08	S.H
B	1.66in Mounting Spacing; VSWR: 2.0	Dec-01-08	S.H

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± 1/64 DECIMALS .XX± .015 .XXX± .005 ANGLES ± 1°
TOLERANCE SYM PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLETS R .000 TO R .030
SCREW THREADS PER MIL-S-8879
DIA'S ON A COMMON ℄ Ø.005 MAXIMUM MATERIAL CONDITION
MACHINED SURFACES 125/
DO NOT SCALE DRAWING

DRAWN
CHECKED M. BOAS 01-06-01
ENGINEER
APPROVED S. HUYNH 01-06-01
CAD FILE NO

ANTCOM CORP. TORRANCE, CALIFORNIA

OUTLINE DRAWING
L1/L2 ACTIVE, OR PASSIVE
GPS ANTENNA

SIZE D | CAGE NO 3CVE1 | DRAWING NO 4G1215X-XXC-3 | REV B
SCALE 1/1 | SHEET 1 OF 1