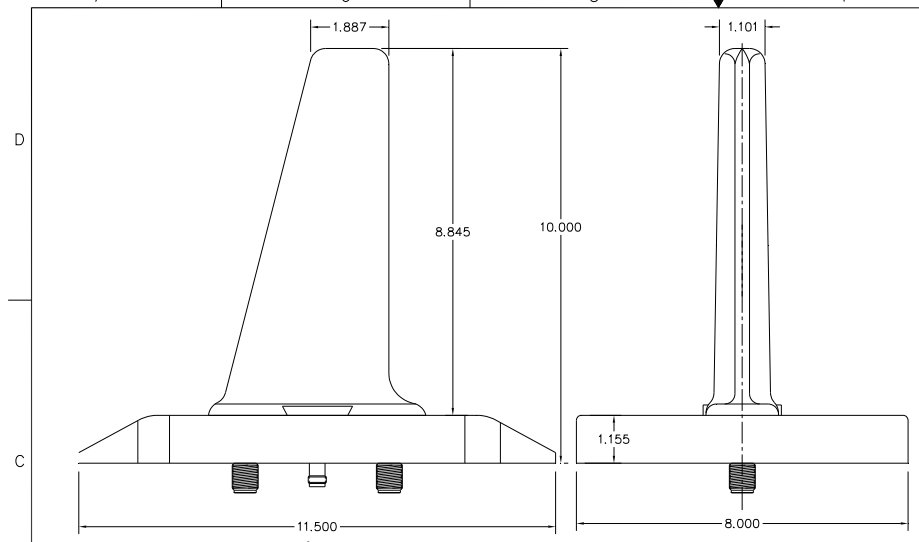
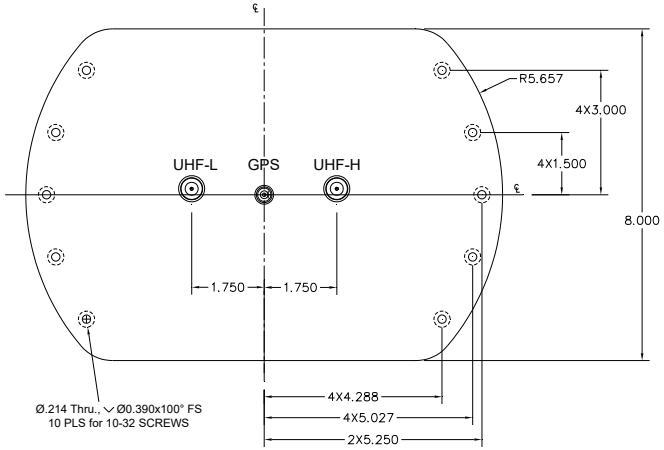
L1L2 GPS/UHF-SATCOM Antenna,
P/N: 10BUG0215PA-XNT-X
(8.0 x 11.5 x 10) in, Top Mount Blade Configuration

ISO 9001:2008/FAA Approved Facility

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

ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501, USA . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com





SPECIFICATIONS

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	GPS				UHF
FREQUENCY:	L1: (1575.42 ±12) MHz		L2: (1227.60 ±12) MHz		High Angle: 240-500 MHz Low Angle: 225-500 MHz
RADIATION PATTERN:	HEMISPHERICAL				High Angle: RHCP Low Angle: Vertical
POLARIZATION:	RHCP		RHCP		
VSWR:	< 1.5:1		< 1.5:1		< 2.0:1
IMPEDANCE:	50 ohms				
ANTENNA GAIN (dBic):	Free Space	4 ft G.P.	Free Space	4 ft G.P.	4 ft G.P.
@ 90 ° (ZENITH):	+ 5.4	+ 2.4	+ 4.1	+ 5.6	+ 5.0 (High Angle)
@ 10 ° Elevation:	- 1.6	- 1.7	- 3.2	- 2.8	+ 4.0 (Low Angle, Tested
@ 20 ° Elevation:	0.0	+ 0.9	- 1.6	+ 0.5	on 10 ft. Ground Plane)
@ 30 ° Elevation:	+ 1.3	+ 2.0	- 0.3	+ 2.4	
@ 60 - 90 ° Elevation:	> 4.2	> 2.5	> 2.7	> 3.6	
BEAM WIDTH (3dB):	102 Deg.	145 Deg.	93 Deg.	80 Deg.	
AXIAL RATIO:	2 dB		2 dB		
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				
REJ. @ (-50/+50) MHz	-41 dB / -59 dB		-40 dB / -40 dB		
@ (-100/+100) MHz	< -65 dB		< -65 dB		
LIGHTNING PROTECTION:	DC GROUNDING				
POWER HANDLING:	200 Watt CW				

MECHANICAL:

SIZE:	WIDTH: 8in, LENGTH: 11.5In, HEIGHT: 10 in.
WEIGHT:	5 Lbs. (2.3Kg)
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 FOR GPS, N FEMALE FOR SATCOM (OPTION: SMA, N, MCX, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
SIDE LOAD:	~10 psi
DRAG:	< 2.8 lbs. @Mach .85, Elevation 35,000ft
VIBRATION:	> 30 G's
SHOCK:	20 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

CONFORMALITY:	HIGH(INCHES):	SHAPE:	FREQ. BAND:	UHF/GPS AMP:
CC: CONFORMAL/CURVED		C: CIRCULAR	1215: L1/L2	PP: UHF/GPS ARE PASSIVE
CF: CONFORMAL/FLAT		S: SQUARE	15: L1 ONLY	PA: UHF IS PASSIVE, GPS IS ACTIVE
NF: NOT CONFORMAL/FLAT		R: RECTANGULAR	0215: L1/L2	
NC: NOT CONFORMAL/CURVED		B: BLADE	GPS/UHF	
		R: RECTANGULAR	0203: UHF only	

QUANTITY REQD	DESCRIPTION	PART NO	ITEM NO
			2
10	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	1
	PARTS LIST		

P/N: 10BUG0215PA-XNT-X

NUMBER OF ELEMENT:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
	X: NO CABLE	S: 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, NB: N, N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
	R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

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 .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 Mar-05-07 | CAD FILE NO

ANTCOM CORP. TORRANCE, CALIFORNIA

L1/L2 GPS/UHF-SATCOM ANTENNA

SIZE D | CAGE NO 3CVE1 | DRAWING NO 10BUG0215PA-XNT-X | REV A

SCALE 1/1 | SHEET 1 OF 1

ORIGINAL DOCUMENT (RED STAMP IS RED)

NMO Connector Option is Now Available for Some Antennas