



ISO 9001:2008/FAA Approved Facility

# Active L1-GPS/Rx-Thuraya/(Rx-Inmarsat/Iridium)/&Rx-Globalstar

## P/N: 3GL1RxTIRRxG-AAAA-XSSSS-4-X

### 3.5" Dia., 4 Element CRPA ANTENNA ARRAY

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



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**Phase Center:**  
0.613 [15.57]

**Phase Center:**  
0.613 [15.57]

**Phase Center:**  
0.601 [15.27]

**Phase Center:**  
0.601 [15.27]

**Phase Center:**  
0.209 [5.30]

### SPECIFICATIONS

**ELECTRICAL:**

	L1 GPS (1575 ± 17) MHz	Rx-Thuraya (1542.5 ± 17.5) MHz	Rx-INMARSAT/IRIDIUM (1525-1559)/(1609-1626) MHz	Rx-Globalstar (1642.5 ± 17.5) MHz
FREQUENCY:				
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	RHCP	LHCP	RHCP	LHCP
VSWR:	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms	50 ohms	50 ohms
ANTENNA GAIN (dBic):				
@ 90 ° (ZENITH):	+ 3.8			
@ 10 ° Elevation:	- 4.3			
@ 20 ° Elevation:	- 2.2	TBD	TBD	TBD
@ 30 ° Elevation:	- 0.7			
@ 60 - 90 ° Elevation:	> 2.5			
BEAM WIDTH (3dB):	120 Deg.			
AXIAL RATIO:		2.5 dB		
LIGHTNING PROTECTION:		DC GROUNDING		
LNA GAIN:		(22.0H/-2.0) dB		
LNA NOISE FIGURE:		1.8 dB		
LNA P1dB Out:		+16 dBm		
VOLTAGE/CURRENT:		(2.5 TO +5) VOLTS DC / (15 TO 25) mA		

**MECHANICAL:**

SIZE: DIAMETER 3.50 in. [ 88.90 mm]  
HEIGHT 0.834 in. [21.18 mm]

WEIGHT: 8.20 oz. (.232 Kg)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5441

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
COMPOSITE RADOME, ABRASION, UV, SOLVENT,  
SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: SMA FEMALE  
(OPTION: RIGHT ANGLE SMA, MCX, MMCX)

**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, DO-228, MIL-C-5541,  
MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

CONFORMAL RADIUS OPTION:	4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	5
-3: 3.000" RADIUS (SDBII)	A/R			
-3.5N: 3.500" RADIUS (NETFIRE, GMLRS, NLOS)				
-4P: 4.000" RADIUS (PAVEWAY)				
-5M: 6.000" RADIUS (MAVERICK)				
-7.5EM: 7.500" RADIUS (EGBU, MALD)	1	ADHESIVE GASKET	12345G-3M-3G	1
-14A: 14.00" RADIUS (ACM)				
-X: X" RADIUS (0 Flat, No Radius)				
-F: FLAT (WITHOUT RADOME)				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	<b>ANTCOM CORP.</b> TORRANCE, CALIFORNIA	
FRACTIONS DECIMALS ANGLES		
= 1/64 .0005 ± .1°		
TOLERANCE SURF PER ANSI Y14.5		
REMOVE ALL BURRS		
BREAK EDGES TO R .015		
FILED & DIM TO R .030		
SIZE IN THIS CASE PER MIL-S-8879		
DIA'S ON A CANNOT > .005		
MACHINED SURFACES		
DO NOT SCALE DRAWING	DATE: S. HUYNH Oct-25-11	DRAWING NO: 30L1RxTIRRxG-AAAA-XSSSS-4-X
	CAD FILE NO: D13CVE1	SHEET 1 OF 1

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	RxTxT: RxTx-Thuraya; RxTxTIR: Rx-Thuraya & Rx-Iridium/L1-GPS	A: WITH LNA
1.9: 1.9" SQ.	L1RxT: L1-GPS & Rx-Thuraya; L1RxIR: L1-GPS & Rx-Iridium	P: WITHOUT LNA
2: 2" DIA.	L1RxTxT: L1-GPS & RxTx-Thuraya; L1L2RxTxT: L1/L2-GPS & RxTx-Thuraya	
3: 3.5" DIA.	L1RxTIR: L1-GPS & RxTx-Iridium; L1L2RxTIR: L1/L2-GPS & RxTx-Iridium	
4: MINI ARINC, 42: ARINC 743	L1RxTIRRxG: L1-GPS & Rx-Thuraya & (Rx-Inmarsat/Rx-Iridium) & Rx-Globalstar	

CABLE LENGTH:	Connector:	COLOR:
X: NO CABLE	S: SMA; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: M/C; N: No. Mag.	N: N; M: 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

NMO Connector Option is Now Available for Some Antennas