



FAA Approved Facility

2 Element CRPA L1/L2 GPS Antenna
 P/N: 1.2G1215P2S-XNMM-4-C (J1 = L1/L2 RHCP & J2 = L1/L2 LHCP)
 P/N: 1.2G1215P2-XNMM-4-C (J1 = L1 RHCP, J2 = L2 RHCP)
 P/N: 1.2G1215P2-2.5X-4-C (J1 = L1 RHCP, J2 = L2 RHCP) & with 2.5in D1320WS5BS Trimmed Cables
 P/N: 1.2G1215P2L-XNMM-4-C (J1 = L1/L2 Linear E, J2 = L1/L2 Linear H)
 "-PL-" or "-AL-" for Limiter Options for High Power Pulse Protection



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Wide Band GNSS Option Is Available

Technical drawing showing top and side views of the antenna. Dimensions include: R.105 [R2.67], 1.250 [31.75] SQ., .512 [13.00], 3X 1.100 [27.94], 8X .15 DEEP (ONLY 2 NEEDED FOR MOUNTING), .400 [10.16], 1.100 [27.94], 2X .161 [4.08], 2x.161 [4.08], and .400 [10.16]. Labels include J1, J2, and CABLE/CONNECTOR.

SPECIFICATIONS

ZONE	REVISIONS			
	REV	DESCRIPTION	DATE	APPROVED
-	-	-	-	-

ELECTRICAL:

	J1		J2	
FREQUENCY:	L1: (1575.42 ±12) MHz		L2: (1227.60 ±12) MHz	
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	DUAL RHCP/LHCP			
VSWR:	< 1.5:1		< 1.5:1	
IMPEDANCE:	50 ohms		50 ohms	
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	Free Space	3 in G.P.
@ 90 ° (ZENITH):	-0.8	+3.8	-3.7	+2.7
@ 10 ° Elevation:	-9.3	-4.3	-9.9	-6.3
@ 20 ° Elevation:	-6.8	-2.2	-9.2	-4.2
@ 30 ° Elevation:	-5.2	-0.7	-7.8	-2.4
@ 60 - 90 ° Elevation:	> -2.1	> 2.5	> -4.7	> 1.3
BEAM WIDTH (3dB):	100 Deg.	120 Deg.	100 Deg.	90 Deg.
AXIAL RATIO:	2.5 dB		3 dB	
LIGHTNING PROTECTION:	DC GROUNDING			

LNA OPTION:

LNA GAIN: 24.0 dB
 LNA NOISE FIGURE: 1.8 dB
 LNA P 1dB Out: +16 dBm
 VOLTAGE/CURRENT: (+2.8 TO +28) Volts DC / (15 TO 25) mA

MECHANICAL:

SIZE: 1.250 in.[31.75 mm] SQ.
 HEIGHT: 0.512 in. [13.0 mm]
 WEIGHT: 1.1 oz. (31.2 g)
 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: X in" LONG FLEXIBLE CABLE / CONNECTOR (OPTION: SMB, SMC, SMP, SSM, SSMB, SSMC, SSMP, OR HFL)

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 40 dB LNA
2: 2.6" DIA.		P: PASSIVE (WITHOUT LNA)
3: 3.5" DIA.		P2: J1: (L1 RHCP), J2: (L2 RHCP)
4: MINI ARINC		P2S: J1: (L1/L2 RHCP), J2: (L1/L2 LHCP)
		P2L: J1: (L1/L2 LINEAR-E), J2: (L1/L2 LINEAR-H)

P/N: 1.2G1215P2-XNMM-4-C

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA, T: TNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
#: CABLE LENGTH (IN)	MM: MMXX, SMB, SMC, SSM, SSMB, SSMC, SMP, SSMP, HFL	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
		-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
		-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: TAN #33446 PER FED-STD-595B

1. DIMENSIONS IN BRACKETS ARE IN ARE IN MILLIMETERS [MM]
 NOTES: UNLESS OTHERWISE SPECIFIED:

QUANTITY	RECD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV	NO.
1								3
1								2
1		ADHESIVE GASKET	123456-3M-1.2G	-	-	-		1
-2	-1							

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE IN 16ths DECIMAL ANGLES ± 1/64 .008 .015 .005 ± 1° TOLERANCE DIM PER AMS Y14.5 BREAK EXTERNAL DIMS .005 TO .015 FILLER IN DIMS 12.5 & 12.5 DIMS ON A COMMON & 27.000 MACHINED SURFACES .007 DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA
 DUAL L1/L2 ACTIVE or PASSIVE GPS ANTENNA
 SCALE 1/1 SHEET 1 OF 1

Antenna Mounts: http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf
 Amplifiers/Power Divider/Combiner/Filter: http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf