

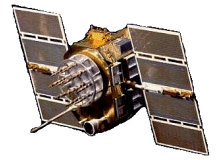


ISO 9001:2008/FAA Approved Facility

Passive L1/L2 GPS Antennas

P/N: 1.9G1215P-XSQ-2 Rev D (For FS 36375 Gray)

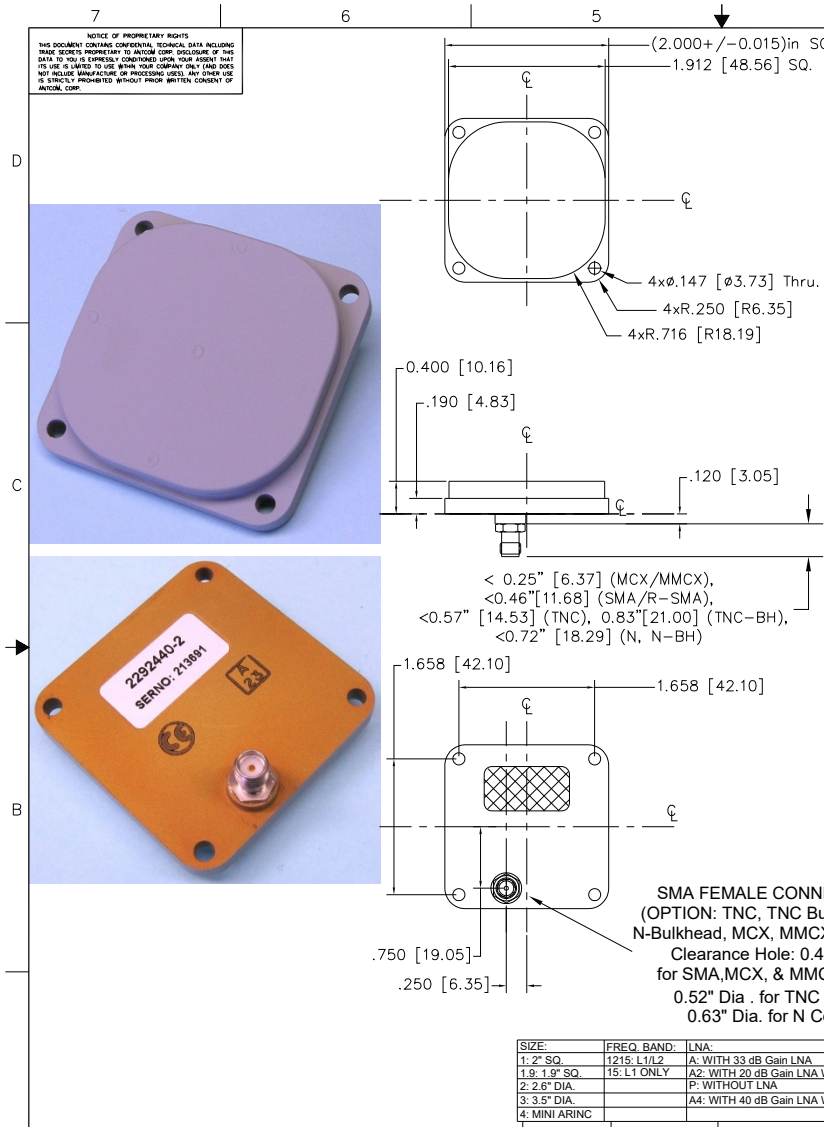
2.0" Square, Flat Mount Configurations



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

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SPECIFICATIONS

ELECTRICAL:

	REVISIONS					
	ZONE	REV	DESCRIPTION	DATE	APPROVED	
	D	2.004in	to (2.006+/-0.015)in	May-10-10	S.H	

	L1: (1575.42 ±12) MHz			L2: (1227.60 ±12) MHz		
	RADIATION PATTERN:	HEMISPHERICAL			HEMISPHERICAL	
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.7:1			< 1.7:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
@ 90° (ZENITH):	+ 3.7	+ 4.7	+ 3.1	- 1.7	+ 3.3	+ 4.5
@ 10° Elevation:	- 2.9	- 1.8	- 1.9	- 7.3	- 3.8	- 3.5
@ 20° Elevation:	- 1.3	- 0.3	+ 0.6	- 6.2	- 2.0	- 0.8
@ 30° Elevation:	0.0	+ 1.4	+ 1.7	- 5.2	- 0.5	+ 1.4
@ 60 - 90° Elevation:	> 3.0	> 3.9	> 2.4	> - 3.2	> 2.7	> 2.2
BEAM WIDTH (3dB):	108 Deg.	114 Deg.	143 Deg.	100 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING					
LNA GAIN (OPTIONAL):	33 dB (Option A), 20 dB (Option A2)					
LNA NOISE FIGURE:	3.0 dB (Option A), 2 dB (Option A2)					
LNA P1dB Out:	+13 dBm					
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-2.4)V/<50mA					

MECHANICAL:

SIZE: LENGTH = 2.000 in, WIDTH = 2.000 in
 HEIGHT = 0.400in

WEIGHT: 2.1 oz. (62 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDIUM PER MIL-C-5541F Type I Class 1A or 3

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

CONNECTOR: SMA FEMALE CONNECTOR
 (OPTION: TNC, TNC-Bulkhead, N, N-Bulkhead,
 MCX, SMA, or Cable)

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	A: WITH 33 dB Gain LNA
1.9: 1.9" SQ.	15: L1 ONLY	A2: WITH 20 dB Gain LNA WITHOUT REJECTION FILTERS
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		A4: WITH 40 dB Gain LNA WITHOUT REJECTION FILTERS
4: MINI ARINC		

P/N: 1.9G1215P-XSQ-2

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 #36375 PER FED-STD-595B
#: CABLE LENGTH (IN)	N, NB: N, N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37036 PER FED-STD-595B

QUANTITY	REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1							3
1							2
1							1
-2	-1						

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS: DECIMALS: ANGLES: ± 1/64 .XXX .015 ± 1°	ORIGINALLY DRAWN: S. HUYNH June-30-09	ANTCOM CORP. TORRANCE, CALIFORNIA L1/L2 PASSIVE OR ACTIVE GPS ANTENNA DWG NO: 3C1VE1 PART NO: 1.9G1215P-XSQ-2 REV: D SCALE: 1/1 SHEET: 1 OF 1
TOLERANCE .5MM PER ANSI Y14.5 REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 SIZES IN SQUARES PER MIL-S-8879 DATS ON A COMMON 1/2" DIA	ORIGINALLY DESIGNED: S. HUYNH June-30-09	
MACHINED SURFACES: V	UPDATED: S. HUYNH Oct-30-13	
DO NOT SCALE DRAWING	UPDATE DRAWN: P. TRAN Oct-30-13 APPROVED: S. HUYNH Oct-30-13	

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

NMO Connector Option is Now Available for Some Antennas