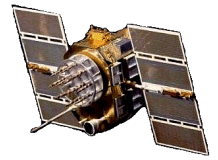




# Active L1/L2 GPS Antenna With External Antenna Passed Through

**P/N: 2.1CG1215A-XSSGF4-2-2.25-ICS**

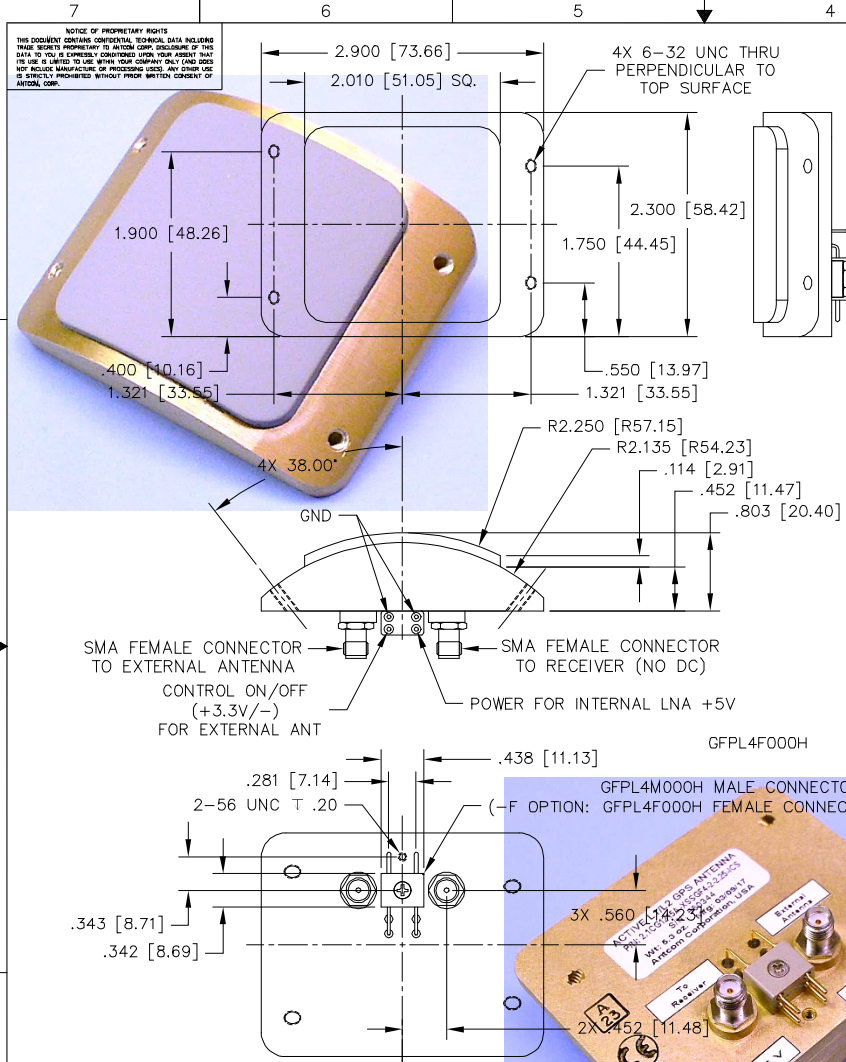
Other Frequencies, Connectors and Color Options are Available



ISO 9001:2008/FAA Approved Facility

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

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**P/N: 2.1CG1215A-XSSGF4-2-2.25-ICS**

<b>FREQ. BAND:</b>	<b>LNA:</b>	<b>CONNECTOR:</b>	<b>COLOR:</b>
1215: L1/L2	A: WITH 33 dB LNA	GF4: GFPL2M2FCDOH	-1: GLOSS WHITE #17925 PER FED-STD-595B
15: L1 ONLY	A2: WITH 20 dB LNA	S: SMA, T: TNC	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	A4: WITH 40 dB LNA	RS: R-SMA, T: TNC	-3: CAMO GREEN #34094 PER FED-STD-595B
	P: PASSIVE (WITHOUT LNA)	MM: MMCX, SMB, SMC, SSMA	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		SSMB, SSMC, SMP; SSMP	-5: DESERT TAN #33446 PER FED-STD-595B

### SPECIFICATIONS

ELECTRICAL:	L1: (1575.42 ±15) MHz		L2: (1227.60 ±15) MHz			
	FREQUENCY:					
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP		RHCP			
VSWR:	< 1.5:1		< 1.5:1			
IMPEDANCE:	50 ohms		50 ohms			
ANTENNA GAIN (dBi):	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					
<b>LNA OPTION:</b>	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 microsec Pulse (-AL-)					

### MECHANICAL:

SIZE: LENGTH = 2.90in. [73.66 mm], WIDTH = 2.30in. [58.42 mm]  
 HEIGHT: 0.803in. [20.40 mm]

WEIGHT: 3.95 oz. (112 g)

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

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

CONNECTOR: GFPL4M000H MALE CONNECTOR  
 (OPTION: GFPL4F000H FEMALE, SMB, SMC, SSMA, SSMC, SSMP, MCX, MMCX, TNC, OR N)

### 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

1	2	3	4	5	6	7	8
1							
-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	THM NO
QUANTITY REQD		PARTS LIST					

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ±1/16 0.005 0.015 ±1°	ORIGINALLY DRAWN S. HUYNH July-27-16	<b>ANTCOM CORP.</b> TORRANCE, CALIFORNIA
TOLERANCE SMI PER ANSI Y14.5 REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILLET R .005 TO R .010 SLOPE INCREASE PER MIL-S-8879 30° ON 4 CORNERS & 90° ANGLES WASHED SURFACES 125	ORIGINALLY DESIGNED S. HUYNH July-27-16	
DO NOT SCALE DRAWING	UPDATED S. HUYNH Mar-24-17	
	UPDATE DRAWN P. TRAN Mar-24-17	
	APPROVED S. HUYNH Mar-24-17	<p>D3CVE1</p> <p>SCALE 1/1</p> <p>SHEET 1 OF 1</p>