



FAA Approved Facility

# 7-Elements CRPA L1/L2 GPS Antenna Array

## P/N: 7NF-5.75CG1215PL-23SSMB-4-10AM (for JDAM MK-82)

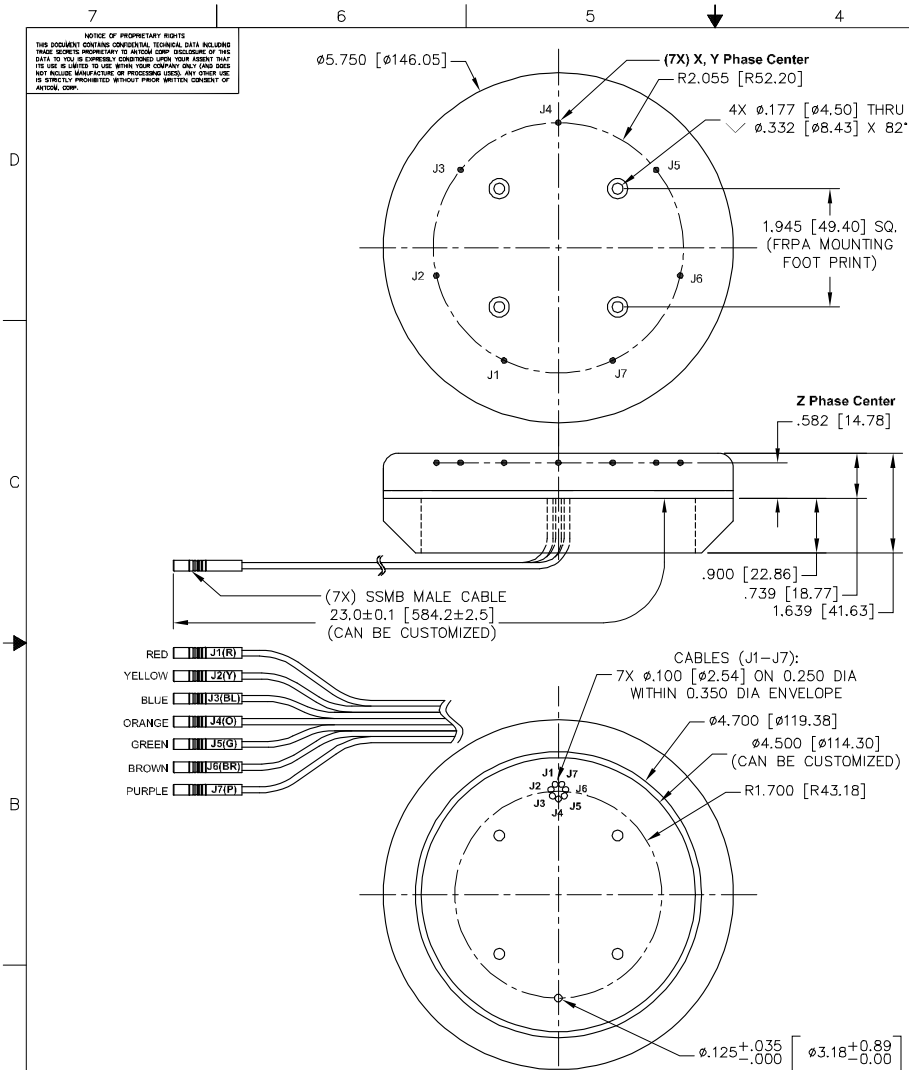
Other Mounting Hole Patterns, Cables, Connectors and Output Locations can be Customized

“-PL-” or “-AL-” for Limiter Options for High Power Pulse Protection



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Wide Band GNSS Option Is Available



SPECIFICATIONS	REVISIONS			
	ZONE REV	DESCRIPTION	DATE	APPROVED

**ELECTRICAL:**

FREQUENCY:	L1: (1575.42 ± 15) MHz	L2: (1227.60 ± 15) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	2.0:1	
IMPEDANCE:	50 ohms	
FRPA ELEMENT GAIN (dBic):	In ARRAY	In ARRAY
@ 90 ° (ZENITH):	+ 3.8	+ 2.7
@ 10 ° Elevation:	- 4.3	- 6.3
@ 20 ° Elevation:	- 2.2	- 4.2
@ 30 ° Elevation:	- 0.7	- 2.4
@ 60 - 90 ° Elevation:	> 2.5	> 1.3
BEAM WIDTH (3dB):	120 Deg.	90 Deg.
LIGHTNING PROTECTION:	DC GROUNDING	
HIGH POWER PROTECTION:	LIMITER (INPUT: +60dBm (1600 V/m, OUPUT: +30 dBm (200V/m))	

**MECHANICAL:**

SIZE: HEIGHT: 0.739 in. [18.77 mm]  
DIAMETER: 5.750 in [146.05 mm]

WEIGHT: 0.9 lbs (408 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5541F, TYPE II CLASS 3

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

CONNECTOR: SSMB MALE CABLE

**ENVIRONMENTAL:**

TEMPERATURE: -71 °F TO +203 °F [-57 °C TO +95 °C]

ALTITUDE: 70,000 ft.

VIBRATION: 40 G's

LEAKAGE: HERMETICALLY SEAL

**FEDERAL & MILITARY SPECIFICATIONS:**

DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-STD-81F  
MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-1L2-100

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CONFORMALITY:	SHAPE:	FREQ. BAND:	LNA:	CONNECTOR:	COLOR:
CC: CONFORMAL/CURVED	C: CIRCULAR	1215; L1/L2	A: WITH LNA	RS: SMAAR; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
CF: CONFORMAL/FLAT	S: SQUARE	15; L1 ONLY	AL: WITH LNA/LIMITER	M: MCX; MM; MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
NF: NOT CONFORMAL/FLAT	T: TRIANGULAR		P: WITHOUT LNA	N: NB; N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
NC: NOT CONFORMAL/CURVED	R: RECTANGULAR			T: TB; TNC; TNC-Bulkhead	-30: OLIVE DRAB GREEN #34088 PER FED-STD-595B
				X: X in Cable	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
					-6: DESERT TAN #33446 PER FED-STD-595B

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	REV
				2
				1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TOLERANCES DECIMALS ANGLES ± 1/64 .0002 .030	ORIGINALLY DRAWN S. HUYNH Mar-20-17	<b>ANTCOM CORP.</b> TORRANCE, CALIFORNIA 5.75in Dia. 7-ELEMENT L1/L2 GPS CRPA ANTENNA ARRAY
TOLERANCE 51M PER ANSI Y14.5	ORIGINALLY DESIGNED S. HUYNH Mar-20-17	
REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015	UPDATED S. HUYNH June-01-17	
DRILL & TAP PER MIL-S-8879 DIA'S ON A COMBINATION OF MACHINED SURFACES	UPDATE DRAWN P. TRAN June-01-17	
DO NOT SCALE DRAWING	APPROVED S. HUYNH June-01-17	

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