



FAA Approved Facility

# 7-Elements CRPA L1/L2 GPS Antenna Array

## P/N: 7NF-5.75CG1215PL-35SSMB-4-7-12AM (for JDAM MK-83/MK-84)

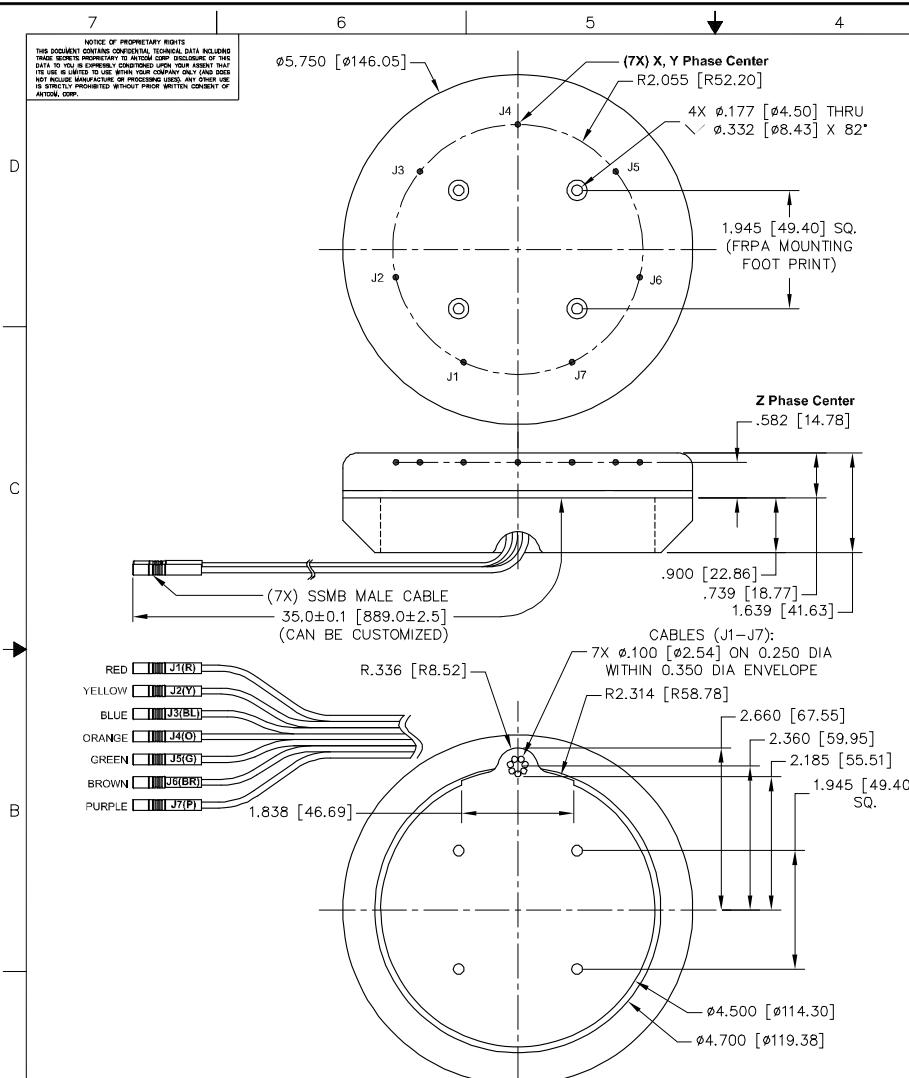
Other Mounting Hole Patterns, Cables, Connectors and Output Locations can be Customized

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



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com

Wide Band GNSS Option Is Available



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CONFORMALITY:	SHAPE:	FREQ. BAND:	LNA:	CONNECTOR:	COLOR:
CC: CONFORMAL/CURVED	C: CIRCULAR	1215; L1/L2	A: WITH LNA	RS: SMA&R; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
CF: CONFORMAL/FLAT	S: SQUARE	15; L1 ONLY	AL: WITH LNA/LIMITER	M: MCM; 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
					-8: DESERT TAN #33446 PER FED-STD-595B

### SPECIFICATIONS

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 ° Elevation:	+ 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

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	REV
				2
				1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ANGLES	
FRACTIONS	± 1/64
DECIMALS	± .030
TOLERANCE SURF PER ANS Y14.5	
BREAK EXTERNAL EDGES .005 TO .015	
FILETS R .010 TO R .030	
SLOPE FINISHES PER MIL-C-8879	
DATA ON A COMMON 1/2" DIA	
MACHINED SURFACES	✓
DO NOT SCALE DRAWING	

ANTCOM CORP. TORRANCE, CALIFORNIA	
5.75in Dia.	
7-ELEMENT L1/L2 GPS	
CRPA ANTENNA ARRAY	
REV: DATE	REV
D   3CVE1   7NF-5.75CG1215PL-35SSMB-4-7-12AM	A
SCALE 1/1	SHEET 1 OF 1

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Amplifiers/Power Divider/Combiner/Filters: http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf