



FAA Approved Facility

7-Element CRPA L1/L2 GPS Antenna Array with Standard FRPA Mounting Foot Print

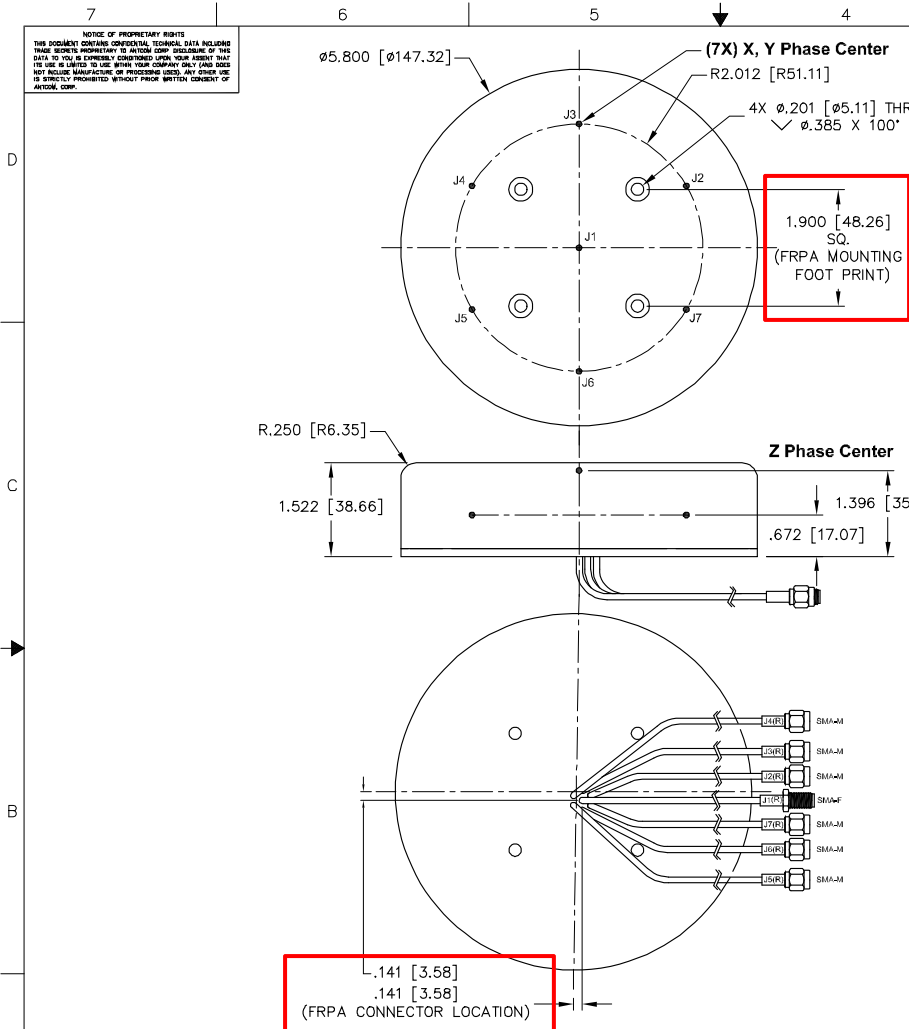
P/N: 7NF-5.8CG1215P-16S-X

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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SPECIFICATIONS

ELECTRICAL:	
FREQUENCY:	L1: (1575.42 ± 12) MHz L2: (1227.60 ± 12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP RHCP RHCP RHCP
VSWR:	< 1.5:1 < 2.0:1 < 1.5:1 < 2.0:1
IMPEDANCE:	50 ohms 50 ohms
FRPA ELEMENT GAIN (dBic):	Reference Auxiliary Reference Auxiliary
	4 ft G.P. 4 ft G.P. In ARRAY 4 ft G.P. 4 ft G.P. In ARRAY
@ 90 ° (ZENITH):	+ 3.5 + 3.8 Amplitude/Phase
@ 10 ° Elevation:	- 2.0 - 4.3 - 3.6 - 6.3
@ 20 ° Elevation:	+ 0.8 - 2.2 Data are - 0.1 - 4.2 Data are
@ 30 ° Elevation:	+ 1.8 - 0.7 Available - 1.8 - 2.4 Available
@ 60 - 90 ° Elevation:	> 2.8 > 2.5 in ASCII > 3.0 > 1.3 in ASCII
BEAM WIDTH (3dB):	139 Deg. 120 Deg. Format 75 Deg. 90 Deg. Format
LIGHTNING PROTECTION:	DC GROUNDING

MECHANICAL:	
SIZE:	HEIGHT: 1.522 in. [38.66 mm] DIAMETER: 5.8 in [147.3 mm]
WEIGHT:	0.8 lbs or 12.8 oz (363 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541F CLASS 1A
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	(1x) 16in SMA-F/ CABLE FOR REFERENCE CHANNEL (6x) 16in SMA-M/ CABLES FOR AUXILIARY CHANNELS
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-L1L2-100

Wide Band GNSS Option Is Available

CONFORMALITY:	FREQ. BAND:	LNA:
CC: CONFORMAL/CURVED	1215; L1/L2	A: ACTIVE (with LNA), AL: ACTIVE WITH LIMITER
CF: CONFORMAL/FLAT	1S; L1 ONLY	P: PASSIVE (without LNA)
NF: NOT CONFORMAL/FLAT		P2: PASSIVE WITH DUAL RHCP/L/CP POLARIZATION
NC: NOT CONFORMAL/CURVED		PZL: PASSIVE WITH DUAL LINEAR POLARIZATION and with 1 RHCP for MORE THAN 1 ELEMENT ARRAY

P/N: 7NF-5.8CG1215P-16S-4

NUMBER OF ELEMENT:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B	
M: MAG.; N: NO MAG.	MC: MMC; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B	
R: CABLE LENGTH (IN)	N, NB; N, NB: Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B	
R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B	

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

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	QTY
4	10-32 PHIL FLAT HEAD SCREWS, 1.5in L		MS24693C280, Item 579-1.5	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES	ORIGINALLY DRAWN	S. HUYNH	OCT-29-14
TOLERANCE S/M PER ANSI Y14.5	ORIGINALLY DESIGNED	S. HUYNH <td>OCT-29-14</td>	OCT-29-14
REMOVE ALL BURRS	UPDATED	S. HUYNH <td>DEC-10-15</td>	DEC-10-15
BREAK EXTERNAL EDGES .005 TO .015	UPDATE DRAWN	P. TRAN <td>DEC-10-15</td>	DEC-10-15
SIZE 8, 10, 12 TO 1/8"	APPROVED	S. HUYNH <td>DEC-10-15</td>	DEC-10-15
SIZE 16, 18, 20 PER ASME Y14.5			
MACHINED SURFACES			
DO NOT SCALE DRAWING			

ANTCOM CORP.		TORRANCE, CALIFORNIA
4.5in Dia. 5-ELEMENT 5 CHANNEL L1L2 GPS CLASS B SAS CRPA ANTENNA ARRAY (5 RHCP)		
DATE	SCALE	SHEET
D 30VE1	1/1	1 OF 1

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