



# 7-Element CRPA L1/L2 GPS + 1 Iridium Antenna Array with Standard FRPA Mounting Holes

P/N: **8NF-5.8CG1216P-XS8-4**

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



FAA Approved Facility

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

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Wide Band GNSS Option Is Available

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**FRPA MOUNTING FOOT PRINT**  
1.900 [48.26] SQ.

**Z Phase Center**  
.582 [14.78]

**SMA FEMALE CONNECTOR**

**CONNECTOR:**  
S: SMA; P: PINS  
M: MCK; Mm: MIMCX  
N, NB: N, N-Bulkhead  
T, TB: TNC, TNC-Bulkhead

SPECIFICATIONS		REVISIONS		
ZONE	REV	DESCRIPTION	DATE	APPROVED

**ELECTRICAL:**

	(J1 TO J7)	J8
FREQUENCY:	L1: (1575.42 ± 12) MHz   L2: (1227.60 ± 12) MHz	IR: (1610.1 - 1626.5) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	2.0:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	In ARRAY	In ARRAY
@ 90 ° (ZENITH):	Amplitude/ + 2.7	Amplitude/ + 3.8
@ 10 ° Elevation:	Phase - 6.3	Phase - 4.3
@ 20 ° Elevation:	Data are - 4.2	Data are - 2.2
@ 30 ° Elevation:	Available - 0.7	Available - 0.7
@ 60 - 90 ° Elevation:	> 2.5 in ASCII	> 2.5 in ASCII
BEAM WIDTH (3dB):	120 Deg. Format	90 Deg. Format
LIGHTNING PROTECTION:	DC GROUNDING	

**MECHANICAL:**

SIZE: HEIGHT: 0.739 in. [18.77 mm]  
DIAMETER: 6.295 in [159.89 mm]

WEIGHT: 0.9 lbs (408 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: SMA CABLE  
(OPTION: TNC, N, or BNC)

**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, DO-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

QUANTITY REQD.	DESCRIPTION	PARTS LIST	PART NO	ITEM NO.
4	10-32 PHIL FLAT HEAD SCREWS, 1.5in L		MS24693C280, Item 579-1.5	1
				2

**ANTCOM CORP.** TORRANCE, CALIFORNIA

7 ELEMENT L1L2 GPS & IRIDIUM CLASS B SAS CRPA ANTENNA ARRAY

REV: **D** | DATE: **3CVE1** | PART NO: **8NF-5.8CG1216P-XS8-4** | SHEET 1 OF 1

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