



FAA Approved Facility

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

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

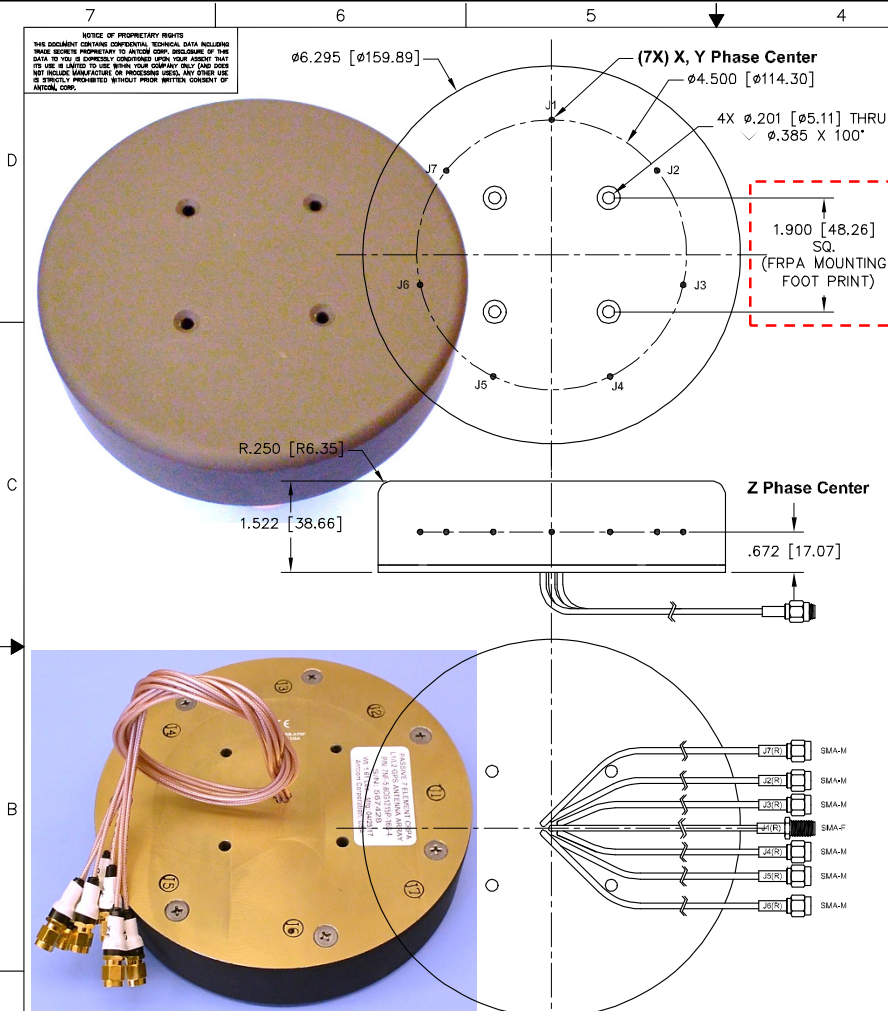
Other Mounting Hole Patterns, Cables, Connectors and Output Locations can be Customized

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



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Wide Band GNSS Option Is Available



SPECIFICATIONS

ZONE		REVISIONS		
REV	DESCRIPTION	DATE	APPROVED	
A	DIAMETER/ELEMENTS	02/20/17	S.H	

ELECTRICAL:

	L1: (1575.42 ± 12) MHz		L2: (1227.60 ± 12) MHz	
FREQUENCY:				
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.	4 ft G.P.	4 ft G.P.
@ 90° (ZENITH):	+3.5	+3.8	+4.9	+2.7
@ 10° Elevation:	-2.0	-4.3	-3.6	-6.3
@ 20° Elevation:	+0.8	-2.2	-0.1	-4.2
@ 30° Elevation:	+1.8	-0.7	-1.8	-2.4
@ 60 - 90° Elevation:	> 2.8	> 2.5	> 3.0	> 1.3
BEAM WIDTH (3dB):	139 Deg.	120 Deg.	75 Deg.	90 Deg.
LIGHTNING PROTECTION:	DC GROUNDING			

MECHANICAL:

SIZE: HEIGHT: 1.522 in. [38.66 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: (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, 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

CONFORMALITY:	FREQ. BAND:	LNA:
CC: CONFORMAL/CURVED	1215; L1/L2	A: ACTIVE (with LNA), AL: ACTIVE WITH LIMITER
CF: CONFORMAL/FLAT	15; L1 ONLY	P: PASSIVE (without LNA)
NF: NOT CONFORMAL/FLAT		P2: PASSIVE WITH DUAL RHCP/LHCP POLARIZATION
NC: NOT CONFORMAL/CURVED		P2L: PASSIVE WITH DUAL LINEAR POLARIZATION and with 1 RHCP FOR MORE THAN 1 ELEMENT ARRAY

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	REV
4	10-32 PHIL FLAT HEAD SCREWS, 1.5in L		MS24693C280, Item 579-1-5	1

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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	M: MMCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B	
I: CABLE LENGTH (IN)	N: NB; N: Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B	
R: RIGHT ANGLE CON.	T: TB; TNC; Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B	

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ANGLES
FRACTIONS ± 1/64 .0005 .030
TOLERANCE 5W PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .016
SQUARE THREADS PER UN-5-8B79
DIA'S ON A COAXIAL Q .25 .005
MACHINED SURFACES
DO NOT SCALE DRAWING

DATE	BY	APP'D
Oct-29-14	S. HUYNH	
Oct-29-14	S. HUYNH	
Mar-20-17	S. HUYNH	
Mar-20-17	P. TRAN	
Mar-20-17	S. HUYNH	
Mar-20-17	S. HUYNH	

ANTCOM CORP.		TORRANCE, CALIFORNIA	
6.295in Dia. 7-ELEMENT 7 CHANNEL L1L2 GPS CLASS B SAS CRPA ANTENNA ARRAY			
REV	REV	DATE	BY
D	3C	VE1	S.H
SCALE 1/1		SHEET 1 OF 1	

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