



FAA Approved Facility

8-Element RHCP L1/L2 GPS Antenna Array

P/N: 8NF-8CG1215X-R-XS-X-1.2-STP (With SMA Male Test Probe Port Option)

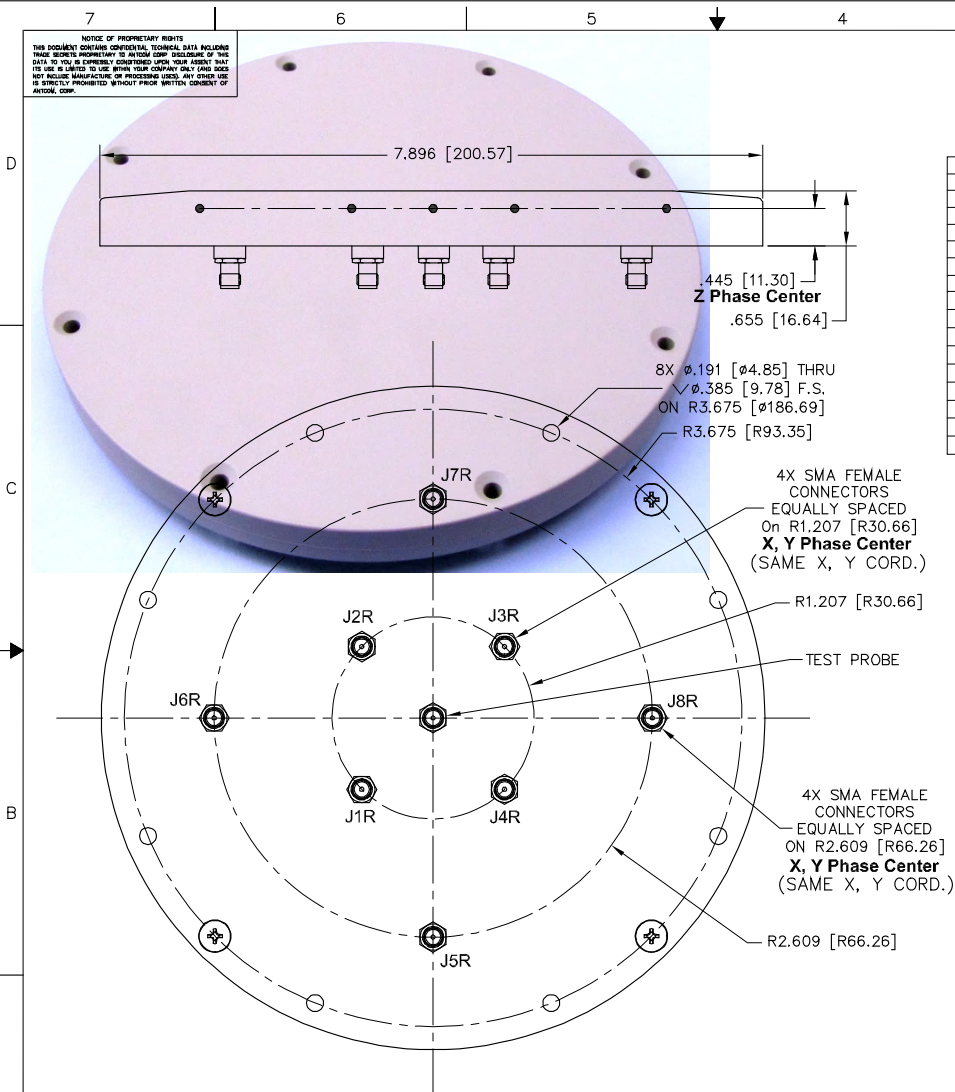
(7.8" Dia. x 0.7" Thick)

“-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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NUMBER OF ELEMENTS:	CONFORMALITY:	FREQ. BAND:	LNA:	CONNECTOR:	COLOR:
SIZE (INCHES):	CC: CONFORMAL/CURVED CF: CONFORMAL/FLAT NF: NOT CONFORMAL/FLAT NC: NOT CONFORMAL/CURVED	1215; L1/L2 15; L1 ONLY	A: WITH LNA AL: WITH LNA/LIMITER P: WITHOUT LNA	S: SMA; P: PINS M: MCX; MM: MMCX N: NB; N: N-Bulkhead T, TB: TNC, TNC-Bulkhead	-1: GLOSS WHITE #17925 PER FED-STD-595B -2: LUSTERLESS GRAY #36320 PER FED-STD-595B -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B -4: LUSTERLESS BLACK #37038 PER FED-STD-595B

SPECIFICATIONS

ELECTRICAL:

	L1: (1575.42 ±12) MHz	L2: (1227.60 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	2:1	
IMPEDANCE:	50 ohms	
ANTENNA ELEMENT GAIN (dBic):	Free Space 3.5 in Dia. 4 ft G.P.	Free Space 3.5 in Dia. 4 ft G.P.
@ 90° (ZENITH):	+ 4.5 + 5.4 + 2.4	+ 2.5 + 4.1 + 5.6
@ 10° Elevation:	- 1.5 - 1.6 - 1.7	- 4.3 - 3.2 - 2.8
@ 20° Elevation:	0.0 0.0 + 0.9	- 3.0 - 1.6 + 0.5
@ 30° Elevation:	+ 1.1 + 1.3 + 2.0	- 1.5 - 0.3 + 2.4
@ 60 - 90° Elevation:	> 3.0 > 4.2 > 2.5	> 1.7 > 2.7 > 3.6
BEAM WIDTH (3dB):	112 Deg. 102 Deg. 145 Deg.	104 Deg. 93 Deg. 80 Deg.
AXIAL RATIO:	2 dB	
NULL DEPTH:	> 30 dB (Analog), 55-60 dB (Digital)	
LIGHTNING PROTECTION:	DC GROUNDING	
POWER HANDLING:	200 Watt CW	

MECHANICAL:

SIZE:	DIAMETER: 7.85 in. [199.39 mm] HEIGHT: 0.655 in. [16.64 mm]
WEIGHT:	1.65 oz. (0.75 Kg)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	8061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	SMA FEMALE (OPTION: TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, or Cable)
ENVIRONMENTAL:	TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C] ALTITUDE: 70,000 ft. VIBRATION: > 30 G's LEAKAGE: HERMETICALLY SEAL
FEDERAL & MILITARY SPECIFICATIONS:	DESIGN TO: FAA ISO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455
ACCEPTANCE TEST PROCEDURE:	ATP-GPS-L1L2-100

QUANTITY	RECD	DESCRIPTION	PARTS LIST	PART NO	FINISH	REV
4	-	MOUNTING SCREWS: 10-32, 3/4"		MS24693C274	-	1
-2	-1					NEW

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES TOLERANCES AND UNITS ± 1/64 .0005 .005 ± 1°	ORIGINALLY DRAWN S. HUYNH 01-05-29	ANTCOM CORP. TORRANCE, CALIFORNIA 8 ELEMENT L1L2 GPS RHCP ANTENNA ARRAY D 3CVE1 8NF-8CG1215P-R-XS-X-1.2-STP SCALE 1/1 SHEET 1 OF 1
TOLERANCE 5V/ PER ANSI Y14.5 REMOVE ALL DIMS BREAK EXTERNAL EDGES .005 TO .015 SURF FINISHES PER MIL-S-8878 2013 ON A COINER & .25/.005 MACHINED SURFACES 12°	ORIGINALLY DESIGNED S. HUYNH 01-05-29	
	UPDATED S. HUYNH Aug-27-14	
	UPDATE DRAWN P. TRAN Aug-27-14	
	APPROVED S. HUYNH Aug-27-14	

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