



FAA Approved Facility

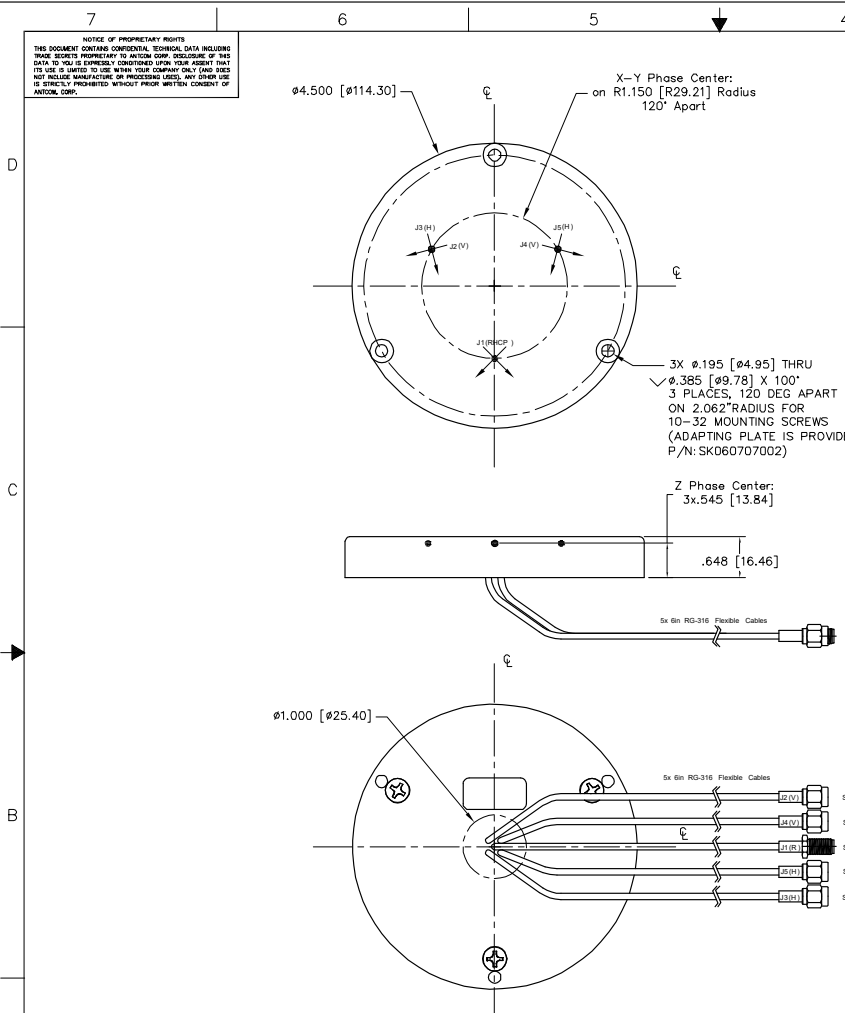
3-Element-5-Channel (1 RHCP, 2 E/2 H) Class A CRPA L1/L2 GPS Antenna Array (4.5in Dia. x 0.648in Thick), P/N: 3NF-4.5CG1215P2L-6S-4 Rev A (Passive)

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



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Wide Band GNSS Option Is Available.
Compatibility to IGAS Receiver Options are Available.



SPECIFICATIONS

ELECTRICAL:	
FREQUENCY:	L1: (1575.42 ±15) MHz L2: (1227.60 ±15) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP RHCP
VSWR:	< 1.5:1 < 1.5:1
IMPEDANCE:	50 ohms 50 ohms
ANTENNA ELEMENT GAIN (dBic) on 3.5 in Dia.:	RHCP (J1) A/R Linea r (J2-J5) RHCP RHCP A/R Linea r (J2-J5)
@ 90 ° (ZENITH):	+ 5.4 1.0 + 2.9 + 4.1 1.0 + 1.6
@ 10 ° Elevation:	- 1.6 1.0 - 4.1 - 3.2 10.0 -3.8/-10.6
@ 20 ° Elevation:	0.0 1.0 - 2.5 - 1.6 6.0 -2.2/-8.2
@ 30 ° Elevation:	+ 1.3 1.0 - 1.2 - 0.3 4.0 -1.5/-5.5
@ 60 - 90 ° Elevation:	> 4.2 1.0 > 1.7 > 2.7 1.0 > 0.2
BEAM WIDTH (3dB):	102 Deg. 102 Deg. 93 Deg. 93 Deg.
LIGHTNING PROTECTION:	DC GROUNDING
POWER HANDLING:	200 Watt CW

MECHANICAL:	
SIZE:	DIAMETER: 4.5 in [114.3 mm] HEIGHT: 0.648 in. [16.5 mm]
WEIGHT:	13oz. (368 g)
FINISH:	SKYDROLRESISTANTPOLYURETHANENAMEL BASEIRIDITEPER MIL-C-5441
MATERIAL:	6061-T6ALUMINUMALLOY BASE COMPOSITE RADOME,IMPACT,ABRASION,UV, SOLVENT, SKYDROLRESISTANCEAND FIRE RETARDANT
CONNECTOR:	1x 6in SMA FEMALE CABLEFOR REFERENCECHANNEL 4x 6in SMA MALE CABLESFOR AUXILIARY CHANNELS (OPTION:TNC, N, MCX, MMCX, SMB, SSMB, SMC, SSMC)
ENVIRONMENTAL:	
TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLYSEAL

FEDERAL & MILITARY SPECIFICATIONS	
DESIGN TO:	FAA TSO-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

CONFORMALITY:	SIZE (INCHES)	SHAPE	FREQ. BAND	LNA
CC: CONFORMAL/CURVED	C: CIRCULAR	1215:L1/L2	A: ACTIVE (with LNA)	AL: ACTIVE WITH LIMITER
CF: CONFORMAL/FLAT	S: SQUARE	15: L1 ONLY	P: PASSIVE (without LNA)	
NF: NOT CONFORMAL/FLAT	T: TRIANGULAR		P2: PASSIVE WITH DUAL RHCP/LHCP POLARIZATION	
NC: NOT CONFORMAL/CURVED	H: HEXAGON		P2L: PASSIVE WITH DUAL LINEAR POLARIZATION and with 1 RHCP for MORE THAN 1 ELEMENT ARRAY	
	R: RECTANGULAR			

P/N: 3NF-4.5CG1215P2L-6S-4

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]	NUMBER OF ELEMENT:	CABLE'S LENGTH	CONNECTOR	COLOR
NOTES: UNLESS OTHERWISE SPECIFIED:	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B	
	M: MAG; N: NO MAG	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B	
	#: CABLE LENGTH (IN)	N: NB; N: N-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	

QUANTITY	REVISIONS	DESCRIPTION	PART NO	FINISH	REV
4	-				5
A/R	-				3
1	1	CLASS A ADAPTING PLATE	SK06070002		1
-2	-1	DESCRIPTION			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		ANTCOM CORP. TORRANCE CALIFORNIA	
FRACTIONS	DECIMALS	3-ELEMENT (CLASS A) 5 CHANNEL PASSIVE L1/L2 GPS ANTENNA ARRAY (1 RHCP, 2E, & 2 H)	
± 1/64	.XXX ± .020	ORDER	M. BOAS Mar-07-05
TOLERANCE 5/16 PER ANS Y14.5		OWNER	S. HUYNH Mar-07-05
REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILLETS R.050 TO R.030 DRAWN TO COMMON DIM. 1-8870 MAGNIFIED SURFACES		DATE	3NF-4.5CG1215P2L-6S-4
DO NOT SCALE DRAWING		SCALE	1/1

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