



FAA Approved Facility

4-Element CRPA L1L2 Glonass/ L1L2 GPS/ OmniStar Antenna Array

P/N: 4NF-5.5CG5A-XS-4 (Active)

P/N: 4NF-5.5CG5P-XS-4 (Passive)

Other Color and Connector Options Are Available

“-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.

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

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X, Y Phase Center
ON 1.593 RAD.

Z Phase Center
.460 [11.68]

4X ϕ .195 [ϕ 4.95] THRU
 ϕ .385 X 100'
ON 2.338 RAD.

658 [16.71]

SMA FEMALE CONNECTOR

4X 10-32 UNF
.20 DEEP
ON 2.688 DIA.

4X 10-32 UNF
.20 DEEP
ON 5.172 DIA.

R1.044 [R26.52]

ELECTRICAL:		SPECIFICATIONS					
		L5 GPS E5, E5a, E5b Galileo L5 IRNSS	L2 GPS B2 Compass	L2 GLONASS E6 Galileo B3 Compass	OmniSTAR / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS
FREQUENCY:		1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15 MHz	1227.60 ± 12 MHz 1207.14 ± 10 MHz	1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10 MHz	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	(1598 - 1606) MHz
RADIATION PATTERN:		HEMISPHERICAL					
POLARIZATION:		RHCP	RHCP	RHCP	RHCP	RHCP	RHCP
VSWR:		< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
IMPEDANCE:		50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
ANTENNA GAIN (dBic):		Free Space 4 ft G.P.	Free Space 4 ft G.P.	Free Space 4 ft G.P.	Free Space 4 ft G.P.	Free Space 4 ft G.P.	Free Space 4 ft G.P.
@ 90° ZENITH:		-3	+2.6	+4.8	+0.0	+2.4	+2.1
@ 10° Elevation:		-9	-10	-3.5	-6.5	-3.5	-4.7
@ 20° Elevation:		-8	-7	-2.0	-0.3	-4.7	-3.2
@ 30° Elevation:		-6	-5	-0.4	+1.8	-3.4	-1.2
@ 60 - 90° Elevation:		> -4	> -4	> 1.3	> 2.6	> -1.5	> -0.1
BEAM WIDTH (3dB):		110 Deg.	120 Deg.	110 Deg.	115 Deg.	110 Deg.	95 Deg.
AXIAL RATIO:		1.5 dB	2 dB	1 dB	1 dB	2 dB	2 dB
LIGHTNING PROTECTION:		DC GROUNDING					
LNA OPTION:							
LNA GAIN (ACTIVE):		35 dB	35 dB	35 dB	33 dB	33 dB	33 dB
LNA NOISE FIGURE:		3.0 dB	3.0 dB	3.0 dB	3.0 dB	3.0 dB	3.0 dB
LNA P _{1dB} Out:		+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm
LNA DC POWER:		2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/r<50mA					
POWER HANDLING:		+55 dBm 1 Microsec pulse Input Max					

MECHANICAL:	
SIZE:	DIAMETER: 5.50 in. [149.86 mm] HEIGHT: 0.658 in. [16.71 mm]
WEIGHT:	1.15 lbs. (.523Kg)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441F
MATERIAL:	6061-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 TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE:	
	ATP-GPS-L1L2-100

CONFORMALITY:	SHAPE:	FREQ. BAND:	LNA:
CC: CONFORMAL CURVED	C: CIRCULAR	1215: L1/L2	A: WITH LNA
CF: CONFORMAL FLAT	S: SQUARE	15: L1 ONLY	AL: WITH LNA/LIMITER
NF: NOT CONFORMAL/FLAT	T: TRIANGULAR	G5: L1L2Glonass/	P: WITHOUT LNA
NC: NOT CONFORMAL/CURVED	R: RECTANGULAR	L1L2GPS/OmniStar	

QUANTITY	DESCRIPTION	PART NO	FINISH	THRU
1	4 MOUNTING SCREWS: 10-32, 1.00"	MS24693C276	-	2
-2	-1			1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES TOLERANCES	ORIGINALLY DESIGNED	ORIGINALLY DRAWN	DATE
± 1/64 .001 .025	S. HUYNH	S. HUYNH	Mar-08-12
	S. HUYNH	S. HUYNH	Mar-08-12
	S. HUYNH	S. HUYNH	June-28-17
	P. TRAN	P. TRAN	June-28-17
	S. HUYNH	S. HUYNH	June-28-17

REMOVE ALL BURRS	DRILL DIA. TYPICAL	DRILL DIA. MAX	DRILL DIA. MIN	DRILL DIA. TYPICAL	DRILL DIA. MAX	DRILL DIA. MIN
0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005

NUMBER OF ELEMENT:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
	S: 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
	R: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
	T: TRIANGLE CON.	T: TB; TNC: TNC-Bulkhead	-4: LUSTER: FSS BLACK #37038 PER FED-STD-595B
			-5: DESERT TAN #33446 PER FED-STD-595B

ANTCOM CORP.	TORRANCE, CALIFORNIA
7.5" DIA. 4 ELEMENT L1L2Glonass/L1L2GPS/OmniStar G5 ANTENNA ARRAY	
D 3CVE1	4NF-5.5CG5P-XS-4
SCALE 1/1	SHEET 1 OF 1