



FAA Approved Facility

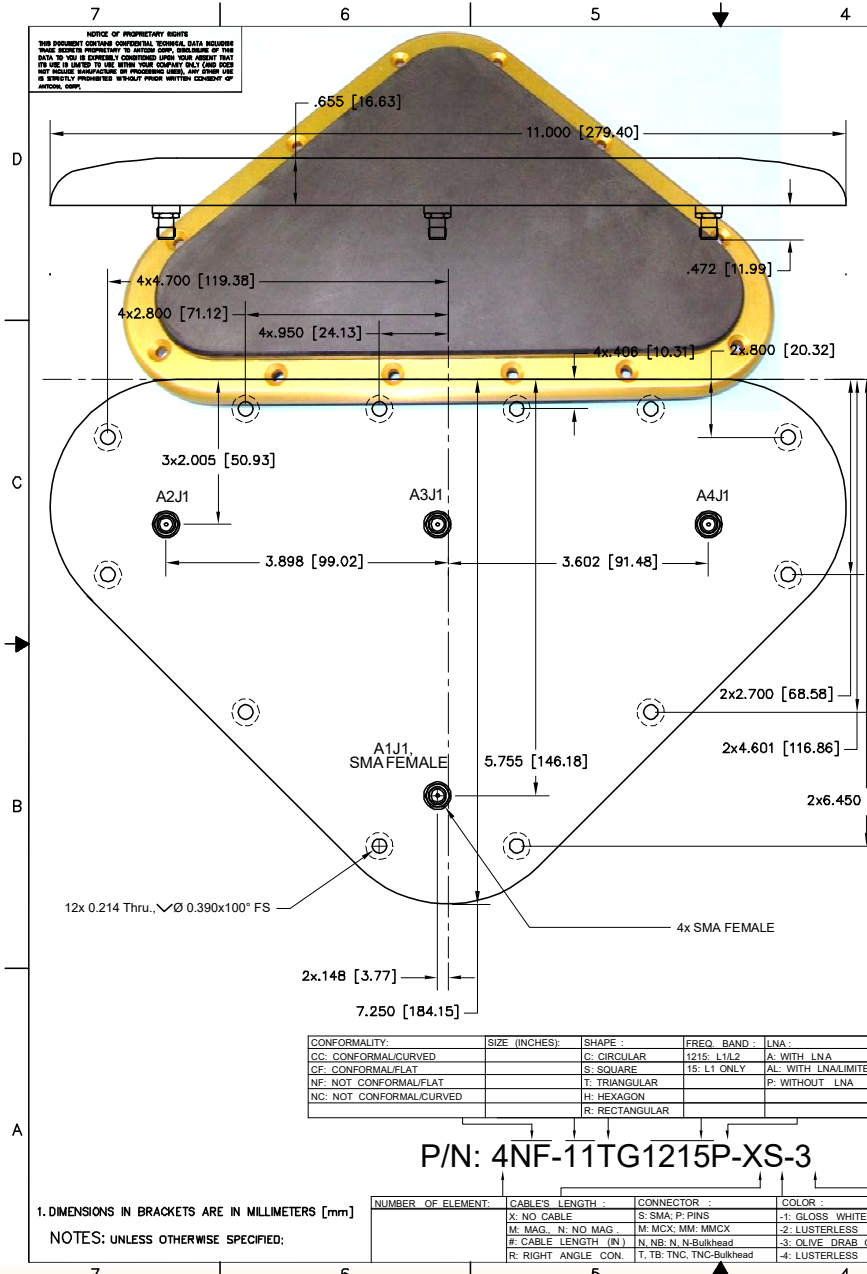
# 4-Element L1/L2 GPS Triangular Antenna Array (11" Dia. x 0.66" Thick), P/N: 4NF-11TG1215P-XS-X

"-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:

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

#### MECHANICAL:

**SIZE:** WIDTH: 11in [279.4mm], LENGTH: 7.25in [164.15mm]  
HEIGHT: 0.655 in. [16.64 mm]

**WEIGHT:** XX oz. (XX Kg)

**FINISH:** SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5441

**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-H-5208A, MIL-STD-810, AND SAE J1455

#### ACCEPTANCE TEST PROCEDURE:

QUANTITY	REQD	DESCRIPTION	PART NO	FINISH	REF NO
4	-	MOUNTING SCREWS: 10-32, 3/4"	MS24683C274	-	5
A/R	-			-	3
1	1			-	1
-2	-1				

CONFORMALITY:	SIZE (INCHES):	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 LNALIMITER
NF: NOT CONFORMAL FLAT		T: TRIANGULAR		P: WITHOUT LNA
NC: NOT CONFORMAL CURVED		H: HEXAGON		
		R: RECTANGULAR		

P/N: 4NF-11TG1215P-XS-3

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

NUMBER OF ELEMENT:	CABLES 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	
F: 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	

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE IN INCHES  
FRACTIONS DECIMALS ANGLES  
± 1/64 ± .005 ± .010 ± .015 ± .020 ± .030 ± .040 ± .050 ± .060 ± .070 ± .080 ± .090 ± .100  
MAGNIFIED SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA

4 ELEMENT L1/L2 GPS TRIANGULAR ANTENNA ARRAY

DESIGNED BY: M. BOAS  
MAY-29-01

APPROVED BY: S. HUYNH  
MAY-29-01

SCALE 1/1

SHEET 1 OF 1

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