



FAA Approved Facility

New High Gain 2-Port (L1 GPS) & (Rx/Tx-Inmarsat/Iridium) Antenna, P/N: G7H-3GL1In-PP-MNSS-X (More Gain Above 45deg Elevation Model) 4" Diameter, Flat, Magnetic Mount, Side Connector Configuration

Antenna Mounts/Adapters: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>



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SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	REVISIONS	
				APPROVED	S.H
A		Correct Gain Table	April-02-10		

FREQUENCY:	Rx Inmarsat OmniStar, L6 Galileo, B1 Compass (RHCP) or Rx-Thuraya (LHCP).	L1 GPS, E1, E2 Galileo, L1 IRNSS (RHCP)	IRIDIUM, L1 GLONASS (RHCP) or Tx-Globalstar (LHCP)	Tx-Inmarsat (RHCP) or Tx-Thuraya (LHCP)
		(1542.5 ± 17.5) MHz	(1575 ± 17) MHz	(1609 -1626) MHz

RADIATION PATTERN: HEMISPHERICAL								
VSWR:	< 1.5:1		< 2.0:1					
IMPEDANCE:	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.
	@ 90 ° (ZENITH):	+ 5.5	+ 6.0	+ 5.8	+ 6.5	+ 6.2	+ 5.4	+ 6.0
	@ 10 ° Elevation:	- 8.0	- 10	- 8.0	- 8.6	- 8.1	- 9.3	- 8.7
	@ 20 ° Elevation:	- 5.4	- 4.5	- 5.1	- 3.6	- 5.0	- 4.5	- 5.3
	@ 30 ° Elevation:	- 2.4	- 0.2	- 2.0	+ 0.8	- 1.8	- 0.4	- 2.1
@ 60 - 90 ° Elevation:	> + 3.5	> + 4.6	> + 3.8	> + 5.6	> + 4.2	> + 4.6	> + 4.0	
BEAM WIDTH (3dB):	70 Deg.	115 Deg.	72 Deg.	123 Deg.	72 Deg.	120 Deg.	72 Deg.	85 Deg.
AXIAL RATIO:	1 dB							
LIGHTNING PROTECTION:	DC GROUNDING							

LNA OPTION for GPS and Rx ONLY ANTENNA:	
LNA NOISE FIGURE:	33 dB Gain
LNA P1dB Out:	3.0 dBm
LNA DC POWER:	+13 dBm
REJECTION @ (-50/+50) MHz:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA
REJECTION @ (-100/+100) MHz:	-40 dB / -40 dB
POWER HANDLING:	< -65 dB
	50 Watts CW (WITHOUT LNA) , 1 Watt CW (WITH LNA)

Ø4.015 [Ø101.98]
R9.21 [R233.87]
R.30 [R7.62]
1.42 [36.14]
.600 [15.24]
.300 [7.62]

MECHANICAL:

SIZE: DIAMETER: 4.015in. [102 mm]
HEIGHT: 1.423in. [36 mm]
10.5oz. (297g)

WEIGHT:

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5541F

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: SMA FEMALE (OPTION: TNC FEMALE)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE: 70,000 ft.
VIBRATION: > 30 G's
LEAKAGE: HERMETICALLY SEALED

FEDERAL & MILITARY SPECIFICATIONS:

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

10-32 UNF-2B
x0.250in Deep
8x Flush Magnets
2x1.235 [31.37],
6-32 UNG
x0.250in Deep
4x.625 [15.88]
4x.815 [20.70]
4x.950 [24.13]
4-40 UNG x0.250in Deep
6-32 UNG x0.250in Deep
6-32 UNG x0.250in Deep
.823 [20.91]
6-32 UNG
x0.250in Deep

SIZE:	Frequency:	GPS and Rx LNA OPTION:
1: 2" SQ.	L1 In: L1+Rx/Tx Inmarsat/Iridium (RHCP)	A: WITH LNA
1.5: 1.5" SQ.	L1 Tr: L1+Rx/Tx Thuraya (LHCP)	P: WITHOUT LNA
2: 2.6" DIA.	L1 Rx: L1+Rx Inmarsat/Iridium (RHCP)	
3: 4" DIA.	L1 Rx: L1+Rx Thuraya (LHCP)	
4: MINI ARINC	In1: Rx/Tx Inmarsat (RHCP)/Thuraya (LHCP)	

P/N: G7H-3GL1In-PP-XMNSS-X

MNT:	CONNECTOR:	COLOR:
M1: FLUSH MAGNET	S: SMA-F: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M2: BIG NON-FLUSH MAGNET	N: N/A	-2: LUSTERLESS GRAY #38390 PER FED-STD-595B
N: NO MAGNET	N: N/A	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
P: CABLE LENGTH (IN)	T: TNC, TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

2. MOUNTING SCREWS & ADHESIVE GASKET ARE SUPPLIED BY ANTCOM

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

UNLESS OTHERWISE SPECIFIED	ANTCOM CORP.
TOLERANCE UNLESS OTHERWISE SPECIFIED	TORRANCE CALIFORNIA
FRACTIONS: DECIMALS: ANGLES	
± 1/64 .001 .015	
± .0005 .010 ± 1°	
TOLERANCE 5M PER ANS Y14.5	
REMOVE ALL BURRS	
BREAK EXTERNAL EDGES .005 TO .015	
DRILL & TAP TO .002	
CHAMFER THREADS PER MIL-C-8879	
DAYS ON A COMPANY	
WASHED SURFACES	
DO NOT SCALE DRAWING	

NMO Connector Option is Now Available for Some Antennas