



IRIDIUM/GPS/Inmarsat/L-Band Antenna, P/N: 3GNSS16P-MX-X

3.5" Diameter, Flat, Front/Back Magnetic Mount Configurations

P/N: 3GNSS16P-NX-X (without Magnet)



ISO 9001:2008/FAA Approved Facility

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

ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501, USA . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

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SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		REVISIONS		

Top View Dimensions:
 Diameter: $\phi 3.530$ [$\phi 89.66$]
 Mounting Screws: $4 \times \phi .20$ [$\phi .511$] Thru. $\sqrt{\phi .385}$ [$\phi 9.78$] X 100" for 10-32 MOUNTING SCREWS
 Mounting Hole Spacing: 1.900 [48.26]
 Mounting Hole Diameter: $.950$ [24.13]
 Mounting Hole Angle: 22.5°

Side View Dimensions:
 Height: $.845$ [21.46]
 Mounting Hole Diameter: $.258$ [6.55]
 Spherical Radius: R6.000 [R152.40]

Magnetic Mount Dimensions:
 SMA Connector (OPTION: TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, or Cable)
 Mounting Hole Spacing: 1.375 " Rad. for Optional Mounting

ELECTRICAL:

	Rx Inmarsat	L1 GPS, OmniStar, L6 Galileo, B1 Compass	L1 GPS, E1, E2 Galileo, L1 IRNSS	IRIDIUM, L1 GLONASS	Tx Inmarsat
FREQUENCY:	(1542.5 ± 17.5) MHz	(1575 ± 17) MHz	(1609 - 1626) MHz	(1642.5 ± 17.5) MHz	
RADIATION PATTERN:	HEMISPHERICAL				
POLARIZATION:	RHCP		RHCP		
VSWR:	< 2.0:1				
IMPEDANCE:	50 ohms				
ANTENNA GAIN (dBi):	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space
@ 90° (ZENITH):	+ 2.5	+ 1.6	+ 3.7	- 1.5	+ 3.0
@ 10° Elevation:	- 4.7	- 2.4	- 3.5	- 3.5	- 4.5
@ 20° Elevation:	- 3.8	+ 0.7	- 2.6	- 0.9	- 3.3
@ 30° Elevation:	- 2.1	+ 2.3	- 0.9	+ 0.3	- 1.5
@ 60 - 90° Elevation:	> + 1.0	> + 2.1	> + 2.3	> 0	> + 1.8
BEAM WIDTH (3dB):	90 Deg.	140 Deg.	85 Deg.	140 Deg.	87 Deg.
AXIAL RATIO:	3.0 dB				
LIGHTNING PROTECTION:	DC GROUNDING				

LNA OPTION:

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

MECHANICAL:

SIZE: DIAMETER: 3.53 in. [89.7 mm]
 HEIGHT: 0.845 in. [21.46 mm]
 WEIGHT: 10.8 oz. (306g)
 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 SEALED

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

SIZE:	FREQ. BAND:	LNA:	QUANTITY REQD	DESCRIPTION	PART NO	FINISH	THRU HOLES
1: 2" SQ		A: WITH LNA	4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274		5
1.8: 1.9" SQ		A: WITH LNA/LIMITER	1	ADHESIVE Rubber Cover (Item 541G3I)	Magnet-Cover-3i		1
2: 2.5" DIA.	16: L1 & P: WITHOUT LNA		-2				
3: 3.5" DIA.	R: TX INMARSAT		-1				
4: MINI AIRINC	G: LONASS/IRIDIUM						

P/N: 3GNSS16P-MS-3

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA: P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N: No Mag	M: MCX: M: MCX	-2: LUSTERLESS GRAY #38630 PER FED-STD-595B
P: CABLE LENGTH (IN)	N: N: NB: N: Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	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 DIMENSIONS ARE IN INCHES	ORIGINAL DRAWN	S. HUYNH	Feb-17-09
FRACTIONS TO BE DECIMALS ANGLES TO BE DEGREES	ORIGINAL DESIGNED	S. HUYNH <td>Feb-17-09 </td>	Feb-17-09
TOLERANCE .5MM PER ANG AND .1145 REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .016 DRAWS & JOES TO .005 DIMS ON A COMPS 1 OF 000 WASHED SURFACES 1/2	UPDATED	S. HUYNH <td>Oct-02-12</td>	Oct-02-12
DO NOT SCALE DRAWING	UPDATE DRAWN	P. TRAN <td>Oct-02-12</td>	Oct-02-12
	APPROVED	S. HUYNH <td>Oct-02-12</td>	Oct-02-12

ANTCOM CORP. TORRANCE, CALIFORNIA

3.5" Dia., Side Con., Mag. Mount
IRIDIUM/GPS
INMARSAT/GLONASS/ANTENNA

D 3CVE1 3GNSS16P-MX-X A

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas