

# L1/L2 GPS/Glonass/L-Band/Galileo Antenna

## P/N: 2DGO1216A-MNS-X

### 2.7" Diameter, Flat Strong Magnetic (20lbs) Mount Configurations

Noise Figure is Now Improved to 1.9 dB for L1 GPS/OmniStar/Glonass and 2.3 dB for L1/L2 GPS/OmniStar/Glonass as of June-01-14  
 Antenna Mounts/Adapters: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

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

“HF” for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: -22dB@1616MHz, -34dB@1660MHz

#### SPECIFICATIONS

	REVISIONS				
	ZONE	REV	DESCRIPTION	DATE	APPROVED
<b>ELECTRICAL:</b>					
FREQUENCY (MHz):					
ANTENNA GAIN(dBic)					
@ 90° (ZENTH);					
@ 10° Elevation;					
@ 20° Elevation;					
@ 30° Elevation;					
@ 60 - 90° Elevation;					
BEAMWIDTH(3dB)					
RADIATION PATTERN					
POLARIZATION					
VSWR:					
IMPEDANCE:					
AXIAL RATIO					
LIGHTNING PROTECTION					
LNA OPTION					
LNA GAIN					
LNA NOISE FIGURE:					
LNA P1dB Out					
LNA DC POWER					
POWER HANDLING					

  

	L2/L5 GPS/ L2/L3 Glonass/ E5A/E5B/E5C Galileo	L2 GPS	Rx L-Band/ L6 Galileo	L1 GPS/ L1/E1/E2 Galileo	L1 Glonass
FREQUENCY (MHz):	(1146-1301)	(1227.60±12)	(1525-1560)	(1555-1595)	(1602-1626)
ANTENNA GAIN(dBic)		FS/3.5° GP 4 ft G.P.	FS/3.5° GP	FS/3.5° GP 4 ft G.P.	FS/3.5° GP
@ 90° (ZENTH);		+3.3 +4.9	+3.1	+5.5 +4.5	+4.3
@ 10° Elevation;		-3.8 -3.6	-3.7	-1.2 -1.4	-2.2
@ 20° Elevation;		-2.0 -0.1	-2.0	+0.3 +1.4	-0.6
@ 30° Elevation;		-0.5 -1.8	-1.3	+1.8 +2.2	+0.8
@ 60 - 90° Elevation;		>2.7 >3.0	>2.0	>4.8 >3.8	>+3.5
BEAMWIDTH(3dB)		106 Deg. 75 Deg.	106 Deg.	106 Deg. 130 Deg.	106 Deg.
RADIATION PATTERN					
POLARIZATION					
VSWR:					
IMPEDANCE:					
AXIAL RATIO					
LIGHTNING PROTECTION					
LNA OPTION					
LNA GAIN					
LNA NOISE FIGURE:					
LNA P1dB Out					
LNA DC POWER					
POWER HANDLING					

  

#### MECHANICAL:

SIZE: DIAMETER: 2.71in. [ 68.81 mm]  
 HEIGHT: 0.845 in. [21.46 mm]

WEIGHT: 4.00 oz. [113 g]

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDIUM 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-I-45208A, MIL-STD-810, AND SAE J1455

#### ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

QUANTITY	RECD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	THRU NO
							5
1		ADHESIVE GASKET	12345G-3M-1G				3
1							2
1							1

  

UNLESS OTHERWISE SPECIFIED	ANTCOM CORP.
FRACCTIONS DECIMALS ANGLES	TORRANCE CALIFORNIA
TOLERANCE 5TH PER ANSI Y14.5	2.7" Dia. Magnetic Mount
REMOVE ALL DIMS	Active L1/L2 GPS/OmniStar
BREAK EXTERNAL EDGES .005 TO .015	& Glonass ANTENNA
FILES # 200 TO # 300	
SCREW THREADS PER MIL-C-8879	
MATCHED SURFACES	
DO NOT SCALE DRAWING	

P/N: 2DGO1216A4-MNS-1

LNA	CABLE LENGTH	CONNECTOR	COLOR
A: 33 dB Gain	X: NO CABLE	S: SMA, P: PINS	1: GLOSS WHITE#17925PERFED-STD-595B
A4: 40 dB Gain	M: MAG, N: NOMAG	M: MCX, MM: MMCX	2: LUSTERLESS GRAY#36320PERFED-STD-595B
A2: 20 dB Gain	MV: FLUSH MAG	N: NB, N: N-Bulkhead	3: OLIVEDRAB GREEN#34031PERFED-STD-595B
P: WITHOUT LNA	#: CABLE LENGTH(IN)	T: TB, TNC, TNC-Bulkhead	4: LUSTERLESS BLACK#37038PERFED-STD-595B
	R: RIGHT ANGLE CON.		

←Color→