



FAA Approved Facility

The **FIXEDMOUNT VI** Fixed Mount **RHCP/LHCP** GNSS Antenna P/N: G8Ant-3A4T21-RL-RoHS With Better X-Pol Rejection/Isolation

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



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Specifications:
 Diameter: $\phi 3.685$ [Ø93.60]
 X, Y Phase Center = 0,0 (Center of Antenna)
 Z Phase Center = 1.035 [26.30]
 Height: 1.309 [33.25]
 O-RING P/N: 2-031/N766-76
 4X 10-32 UNF EQUALLY SPACED ON 1.343 RAD. - .30 DEEP
 4X 6-32 UNG EQUALLY SPACED ON 1.153 RAD. - .250 DEEP
 4X 6-32 UNG EQUALLY SPACED ON 1.343 RAD. - .250 DEEP
 TCN FEMALE CONNECTOR (OPTION: SMA, QMA, SMB, SMC, SSMA, SSMB, SSMC, MCX, MMCX) - ALL FEMALE CONNECTORS -
 P/N: G8Ant-3A4T21-RL-RoHS

SPECIFICATIONS

ELECTRICAL:	REVISIONS					
	ZONE	REV	DESCRIPTION	DATE	APPROVED	
FREQUENCY:	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
RADIATION PATTERN:	1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 12 MHz	1227.60 ± 12 MHz 1207.14 ± 10 MHz	1242 - 1252 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 - 1609 MHz
POLARIZATION:	RHCP/LHCP	RHCP/LHCP	RHCP/LHCP	RHCP/LHCP	RHCP/LHCP	RHCP/LHCP
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 (dBi):						
@ 90° Above Horizon (Top):	+ 0.2	+ 1.3	+ 1.4	+ 4.1	+ 4.9	+ 5.0
@ 15° Above Horizon:	- 4.5	- 3.8	- 3.9	- 3.9	- 3.3	- 3.1
@ 20° Above Horizon:	- 3.5	- 2.9	- 3.0	- 3.1	- 2.5	- 2.3
@ 25° Above Horizon:	- 2.5	- 2.0	- 2.1	- 2.3	- 1.6	- 1.5
@ 30° Above Horizon:	- 2.2	- 1.7	- 1.8	- 1.5	- 0.8	- 0.7
@ 70° Above Horizon:	- 0.2	+ 0.8	+ 0.9	+ 3.4	+ 4.2	+ 4.4
BEAM WIDTH (3dB):	124 Deg.	120 Deg.	120 Deg.	80 Deg.	80 Deg.	80 Deg.
AXIAL RATIO:	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB
MULTIPATH REJECTION (RHCP/LHCP):						
@ 90° Above Horizon (Top):	34 dB	32 dB	30 dB	26 dB	28 dB	29 dB
@ 0° Above Horizon:	8 dB	7 dB	8 dB	18 dB	12 dB	11 dB
@ 15° Above Horizon:	14 dB	15 dB	14 dB	16 dB	14 dB	12 dB
@ 25° Above Horizon:	19 dB	19 dB	17 dB	17 dB	15 dB	15 dB
LIGHTNING PROTECTION:				DC GROUNDING		
LNA GAIN:	42 dB	42 dB	42 dB	43 dB	43 dB	43 dB
LNA NOISE FIGURE:	2.6 dB	2.6 dB	2.6 dB	2.9 dB	2.9 dB	2.9 dB
LNA P1dB Out:	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm
LNA DC POWER:				(3,-24)V <50mA		

MECHANICAL:

SIZE: DIAMETER: 3.68 in. [93.6mm]
HEIGHT: 1.31 in [32.3mm]

WEIGHT: 13.8oz. (391.2 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5541F CLASS 1A

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

CONNECTOR: TCN FEMALE
(OPTION: SMA, N, QMA, SMB, SMC, SSMA, SSMB, SSMC, MCX, MMCX)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
70,000 ft.

VIBRATION: > 30 G's
HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:
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 REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	ITEM NO
4	PAN HEAD SCREWS, 6-32, 3/4" L	McMaster P/N:	91735A151, Item 586-075		3
4	PAN HEAD SCREWS: 10-32, 3/4" L	McMaster P/N:	91735A831, Item 587-075		2
1	O-RING or GASKET, O-Ring Item 550		2-031/N766-76		1

UNLESS OTHERWISE SPECIFIED	ANTCOM CORP.
DIMENSIONS ARE IN INCHES	TORRANCE, CALIFORNIA
FRACTIONS TO BE DECIMALS	
TOLERANCES UNLESS OTHERWISE SPECIFIED	
± 1/64 .0005 .005 ± .1°	
TOLERANCE SYM PER ANSI Y14.5	
REMOVE ALL BURRS	
FINISH ALL SURFACES UNLESS OTHERWISE SPECIFIED	
SCREWS PER MIL-C-8879	
243 IN A COLUMN & 27,000	
MACHINED SURFACES ONLY	
DO NOT SCALE DRAWING	

LNA:	CONNECTOR:	COLOR:
A: WITH LNA	S: SMA; Q: QMA; SMB; SMR; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
P: WITHOUT LNA	M: MCX; MM: MMCX; MMCR: MMCX-R	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
A4: WITH LNA (40 dB)	N: N; NB: NB-Bulkhead	-3: CAMO GREEN #34094 P/LR FED-STD-595B
	T: TCN; TB: TB-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	SMC, SSMC, SSMB, SSMA	-5: DESERT TAN #33446 PER FED-STD-595B

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
2. ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
NOTES: UNLESS OTHERWISE SPECIFIED:

http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf (Amplifiers/Power Divider/Combiner/Filters)