



FAA Approved Facility

The OEM IV

New High Performance Fixed Mount OEM GNSS Antenna

P/N: G8Ant-52PTCX-300G-N140C-S (Passive, No LNA)

P/N: G8Ant-52ATCX-300G-N140C-S (Active, With LNA)

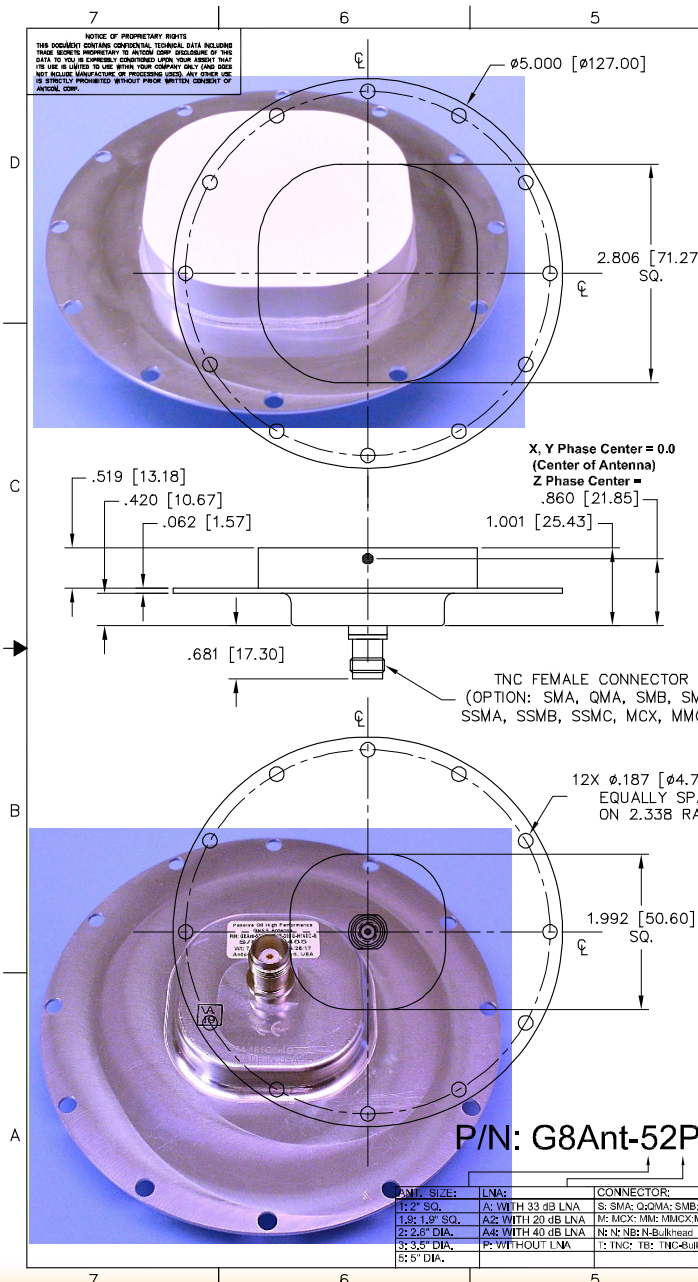
Other Mounting Hole Pattern, Connector and Color Options are Also Available

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 . <http://www.antcom.com>

“HF” for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: $-22\text{dB}@1616\text{MHz}$, $-34\text{dB}@1625\text{--}1660\text{MHz}$,
“HFO” for Additional Omnistar Rejection: $-27\text{dB}@1545\text{MHz}$



		REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED			

ELECTRICAL:						
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
	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
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP
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 (dBic):						
@ 90° Above Horizon (Top):	+ 1.9	+ 3.7	+ 4.1	+ 4.4	+ 5.6	+ 6.2
@ 15° Above Horizon:	- 4.5	- 3.3	- 3.0	- 4.5	- 3.5	- 3.0
@ 20° Above Horizon:	- 3.6	- 2.5	- 2.2	- 3.6	- 2.6	- 2.1
@ 25° Above Horizon:	- 2.7	- 1.6	- 1.3	- 2.7	- 1.6	- 1.1
@ 30° Above Horizon:	- 2.3	- 1.1	- 0.8	- 1.8	- 0.7	- 0.2
@ 70° Above Horizon:	+ 1.2	+ 2.9	+ 3.4	+ 3.6	+ 4.8	+ 5.4
BEAM WIDTH (3dB):	85 Deg.	80 Deg.	80 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):	23 dB	23 dB	22 dB	31 dB	32 dB	32 dB
@ 0° Above Horizon:	19 dB	19 dB	16 dB	10 dB	9 dB	8 dB
@ 15° Above Horizon:	19 dB	16 dB	14 dB	14 dB	13 dB	11 dB
@ 25° Above Horizon:	17 dB	16 dB	15 dB	16 dB	16 dB	14 dB
LIGHTNING PROTECTION:	DC GROUNDING					
LNA GAIN:	42 dB	42 dB	42 dB	43 dB	43 dB	43 dB
LNA NOISE FIGURE (With Filter):	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:	(3.3-24)V / < 50mA					
POWER HANDLING:	3 Watt CW (With LinIter)					

MECHANICAL:

SIZE: DIAMETER: 5.00 in. [127.0 mm]
HEIGHT: 0.928 in [23.57 mm]

WEIGHT: 7.3 oz. (207 g)

FINISH: BASE IRIDIUM PER MIL-C-5541F, TYPE II CLASS 3
RADOME: SKYDROL RESISTANT POLYURETHANE ENAMEL PER FED-STD-595B

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

CONNECTOR: TNC FEMALE
(OPTION: SMA, 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-1L12-100

QTY	DESCRIPTION	PARTS LIST	PART NO	REV
1				2
1				1
-2				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .005 ± 1°	ORIGINALLY DRAWN S. HUYNH May-14-13	ANTCOM CORP. TORRANCE, CALIFORNIA 5.0in. DIAMETER FIXED MOUNT OEM GNSS ANTENNA D 33CVE1 G8Ant-52PTCX-300G-N140C-S SCALE 1/1 SHEET 1 OF 1
TOLERANCE 5VM PER ANSI Y14.5	ORIGINALLY DESIGNED S. HUYNH May-14-13	
REMOVE ALL SURF FINISH ON TYPICAL SURFACES UNLESS OTHERWISE SPECIFIED	UPDATED S. HUYNH April-19-17	
2025 RELEASE UNDER E.O. 14176	UPDATE DRAWN P. TRAN April-19-17	
MACHINED SURFACES 1/2	APPROVED S. HUYNH April-19-17	