



FAA Approved Facility

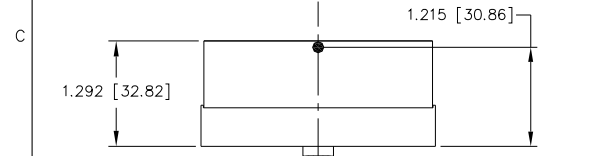
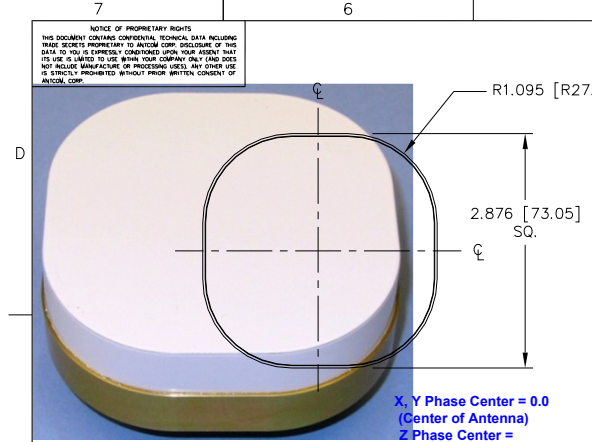
The UNMANNED I New High Performance Unmanned GNSS +S-Band Antenna P/N: G8SAnt-1A4S1 Rev A (2.9" Sq. X 0.99" Thick)

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

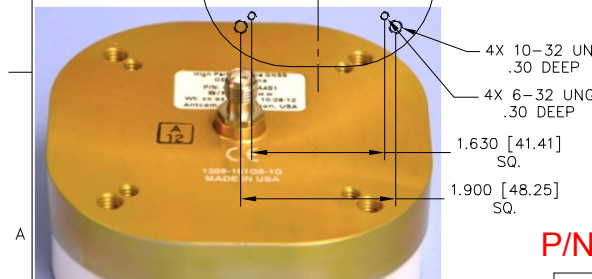
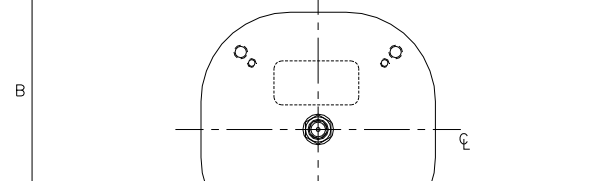


ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

“-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: $-27\text{dB}@1545\text{MHz}$



SMA FEMALE CONNECTOR
(OPTION: TNC, QMA, SMB, SMC, SSMA, SSMB, SSMC, MCX, MMCX)
- ALL FEMALE CONNECTORS -



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

SPECIFICATIONS

FREQUENCY:	L5 GPS E5, E5a, E5b Galileo L5 IRNSS		L2 GPS B2 Compass		L2 GLONASS E6 Galileo E3 Compass		OmniSTAR / L-Band L6 Galileo B1 Compass		L1 GPS E1, E2 Galileo L1 IRNSS		L1 GLONASS		S-Band	
		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		2493 ± 12 MHz
RADIATION PATTERN:	HEMISPHERICAL													
POLARIZATION:	RHCP		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		< 2.0:1	
IMPEDANCE:	50 ohms													
ANTENNA GAIN (dBic):	ON 5° GP	F.S	ON 5° GP	F.S	ON 5° GP	F.S	ON 5° GP	F.S	ON 5° GP	F.S	ON 5° GP	F.S	ON 5° GP	F.S
@ 90° Above Horizon (Top):	+ 1.9	- 2.6	+ 3.7	- 1.8	+ 4.1	- 1.6	+ 4.4	+ 3.8	+ 5.6	+ 4.4	+ 6.2	+ 4.9	+ 4.1	
@ 15° Above Horizon:	- 4.5	- 8.7	- 3.3	- 7.3	- 3.0	- 6.9	- 4.5	- 4.4	- 3.5	- 4.0	- 3.0	- 3.5	- 3.0	
@ 25° Above Horizon:	- 2.7	- 5.6	- 1.6	- 4.2	- 1.3	- 3.8	- 2.7	- 3.0	- 1.6	- 2.5	- 1.1	- 2.0	- 1.4	
@ 30° Above Horizon:	- 2.3	- 3.2	- 1.1	- 3.7	- 0.8	- 3.4	- 1.8	- 2.2	- 0.7	- 1.7	- 0.2	- 1.2	- 0.7	
@ 70° Above Horizon:	+ 1.2	- 2.7	+ 2.9	- 1.9	+ 3.4	- 1.7	+ 3.6	+ 2.9	+ 4.8	+ 3.5	+ 5.4	+ 4.1	+ 3.5	
BEAM WIDTH (3dB):	95 Deg.	130 Deg.	80 Deg.	135 Deg.	80 Deg.	134 Deg.	80 Deg.	77 Deg.	80 Deg.	76 Deg.	80 Deg.	77 Deg.	90 Deg.	
AXIAL RATIO:	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	
MULTIPATH REJECTION (RHCP/LHCP):														
@ 90° Above Horizon (Top):	23 dB	20 dB	23 dB	23 dB	22 dB	21 dB	31 dB	34 dB	32 dB	34 dB	32 dB	32 dB		
@ 0° Above Horizon:	19 dB	-3 dB	19 dB	-3 dB	16 dB	-4 dB	10 dB	15 dB	9 dB	14 dB	8 dB	19 dB		
@ 15° Above Horizon:	19 dB	8 dB	16 dB	8 dB	14 dB	8 dB	14 dB	18 dB	13 dB	17 dB	11 dB	14 dB		
@ 25° Above Horizon:	17 dB	15 dB	16 dB	18 dB	15 dB	16 dB	16 dB	19 dB	16 dB	17 dB	14 dB	16 dB		
LIGHTNING PROTECTION:	DC GROUNDING													
LNA GAIN:	42 dB		42 dB		42 dB		43 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		2.9 dB	
LNA P1dB Out:	+10 dBm		+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 Limiter)													

MECHANICAL:

- SIZE: 2.90 in. SQ. [73.7 mm]
HEIGHT: 1.29 in [32.8mm]
- WEIGHT: 7.7oz. (218.3 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: TNC Female Bulkhead
(OPTION: TNC, QMA, SMB, SMA, 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, DO-228, MIL-C-5541,
MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

P/N: G8SAnt-1A4S1

LNA:	CONNECTOR:	COLOR:
A: WITH LNA	S: SMA, Q: QMA, SMB, SMR, B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
F: WITHOUT LNA	M: MCX, MM: MMCX/MR: MMCX-R	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
AA: WITH LNA (40 dB)	N: N: NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
MIN: FLUSH MAGNET	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	TNB: TNC Bulkhead with TNP: N Connector Thread on Bulkhead	-5: DESERT TAN #33448 PER FED-STD-595B

QUANTITY	RECD	DESCRIPTION	PARTS LIST	PART NO	FINISH	ITEM NO
ANTCOM CORP. TORRANCE CALIFORNIA						
2.8in. SQ. UNMANNED GNSS + S-BAND ANTENNA						
REV	DATE	BY	APP'D	DESCRIPTION	SCALE	SHEET
D	3CVE1			G8SAnt-1A4S1	1/1	1 OF 1

NMO Connector Option is Now Available for Some Antennas