Antcom's G5 Antenna

Active L1/L2 Glonass + L1/L2 GPS + OmniStar/TerraStar Antenna, P/N: G5Ant-1AMNS1

Other Connector/Cable and Color Options Are Available

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

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"-HF" for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: -22dB@1616MHz, -34dB@(1625-1660)MHz
"-HFO" for Additional OmniStar/TerraStar Rejection: -27dB@1545MHz

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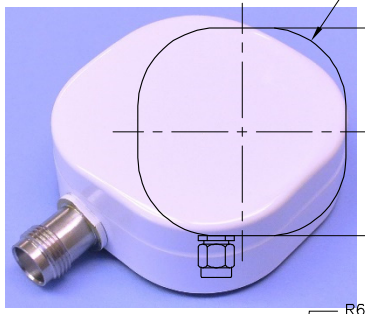

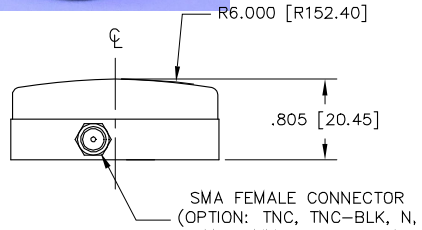

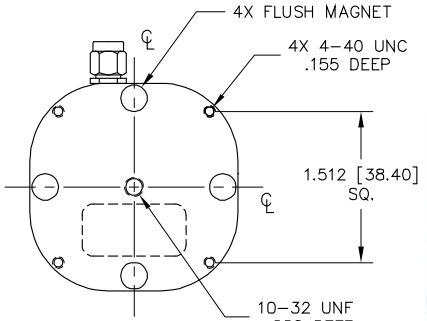

SPECIFICATIONS

ELECTRICAL:

	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	
FREQUENCY:	1176.45 ± 12.0 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15.0 MHz		1227.60 ± 12.0 MHz 1207.14 ± 10.0 MHz		1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10.0 MHz		1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10.0 MHz		1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz		(1598 - 1606) 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):	Free Space	5in G,P	Free Space	5in G,P	Free Space	5in G,P	Free Space	5in G,P	Free Space	5in G,P	Free Space	5in G,P
@ 90 ° (ZENITH):	- 7	- 3	+ 0.5	+ 3	- 0.8	+ 2.3	+ 1.9	+ 1.0	+ 4.1	+ 3.2	+ 2.0	+ 2.6
@ 10 ° Elevation:	- 13	- 10	- 5.6	- 4.1	- 7.1	- 5.0	- 5.0	- 5.7	- 2.8	- 3.2	- 5.1	- 4.2
@ 20 ° Elevation:	- 11	- 9	- 3.9	- 2.7	- 5.4	- 3.3	- 3.9	- 3.9	- 1.9	- 1.6	- 4.1	- 2.6
@ 30 ° Elevation:	- 10	- 8	- 2.6	- 0.8	- 4.3	- 1.5	- 2.6	- 3.0	- 0.4	- 0.6	- 2.6	- 1.4
@ 60 - 90 ° Elevation:	> - 8	> - 5	> -1	> 1.8	> - 2.4	> 1.2	> + 0.8	> + 0.2	> 2.9	> + 2.5	> + 0.8	> + 1.8
BEAM WIDTH (3dB):	105 Deg.	100 Deg.	105 Deg.	105 Deg.	90 Deg.	105 Deg.	95 Deg.	97 Deg.	95 Deg.	100 Deg.	95 Deg.	100 Deg.
AXIAL RATIO:	1.5 dB	3 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB	2 dB	2 dB
LIGHTNING PROTECTION:	DC GROUNDING											
LNA GAIN:	35 dB		35 dB		35 dB		33 dB		32 dB		31 dB	
LNA NOISE FIGURE:	3.0 dB		3.0 dB		3.0 dB		3.0 dB		3.0 dB		3.0 dB	
LNA P1dB Out:	+13 dBm		+13 dBm		+13 dBm		+13 dBm		+13 dBm		+13 dBm	
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA											
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)											

MECHANICAL:

SIZE:	LENGTH: 2.078 in.[52.78 mm] SQUARE HEIGHT: 0.805 in. [20.45 mm]
WEIGHT:	3.7 oz. (105 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541F
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	SMA FEMALE (OPTION: TNC, TNC-BLK, N, MCX, MMCX, or CABLE)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
	70,000 ft.
VIBRATION:	> 30 G's
	HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541F, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

P/N: G5Ant-1AMNS1

SIZE:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ.	A: WITH LNA	X: NO CABLE	S: SMA; RS: RSMA; Q: QMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ.	P: WITHOUT LNA		T: TNC; RT: RTNC	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA.			SMB: SMB; RSMB: RSMB	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
3: 3.5" DIA.			MCX:M; RMCX: RM	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC				-5: TAN #: FS 23446 or 33446, FED-STD-595

ITEM NO	QUANTITY REQD	DESCRIPTION	PART NO	FINISH
2				
1	1	ADHESIVE GASKET	12345G-3M-1G	-

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± 1/64 DECIMALS .XX± .015 .XXX± .005 ANGLES ± 1°
TOLERANCE SYM PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLETS R .005 TO R .030
SCREW THREADS PER MIL-S-8879
DIA'S ON A COMMON ℄ Ø.005
MACHINED SURFACES 125
DO NOT SCALE DRAWING

ORIGINALLY DRAWN	S. HUYNH	Mar-28-13
ORIGINALLY DESIGNED	S. HUYNH	Mar-28-13
UPDATED	S. HUYNH	Mar-17-17
UPDATE DRAWN	P. TRAN	Mar-17-17
APPROVED	S. HUYNH	Mar-17-17

ANTCOM CORP. TORRANCE, CALIFORNIA

2in Square,
L1/L2 Glonass + L1/L2 GPS
+ OmniStar G5 ANTENNA

SIZE: D | CAGE NO: 3CVE1 | DRAWING NO: G5Ant-1AMNS1 | REV: -

SCALE 1/1 SHEET 1 OF 1

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
		-	-	-