Antcom's G5 Antenna,
Active L1/L2 Glonass + L1/L2 GPS + OmniStar/TerraStar Antenna, P/N: G5Ant-1AT1
P/N: G5Ant-1AT1-PW ("PW" is for Side Wall of Antenna Base is Painted Also)
(with Filters, better RTK Performance, Optimized for L1/L2 Glonass & L1/L2 GPS & OmniStar/TerraStar)

FAA Approved Facility

Antenna Mounts: 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: -22dB@1616MHz, -34dB@(1625-1660)MHz
"-HFO" for Additional OmniStar/TerraStar Rejection: -27dB@1545MHz

NMO Connector Option is Now Available for Some Antennas

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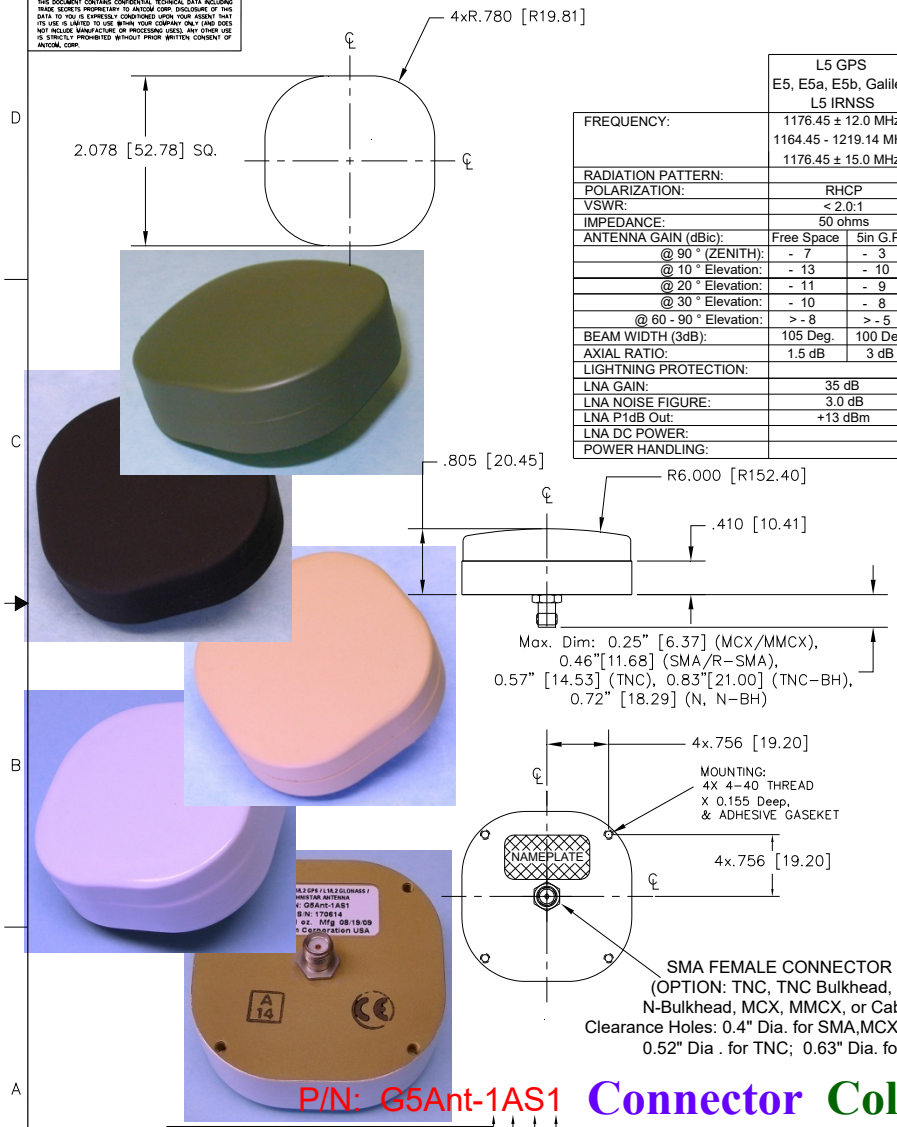
REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
		ECO# 0024, RELEASE	Mar-24-09	S. HUYNH



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		1609 ± 7.0 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 Class 1A
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

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

PARTS LIST

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	ITEM NO
				5
				4
1			–	3
1				2
1	ADHESIVE GASKET	12345G-3M-1G	–	1

SIZE:		LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ.	42: ARINC 743	A: WITH LNA	X: NO CABLE	S: SMA; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ.	52: 2.6" DIA. ON 5" GROUND PLANE	P: WITHOUT LNA		M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA.	72: 7" DIA. CHOKE RING			N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
3: 3.5" DIA.				T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC					-5: TAN #: FS 23446 or 33446, FED-STD-595

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 ℄ ±.005
MACHINED SURFACES 125
DO NOT SCALE DRAWING

DRAWN
CHECKED
ENGINEER
APPROVED S. HUYNH Mar-19-09
CAD FILE NO

ANTCOM CORP. TORRANCE CALIFORNIA

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

SIZE D | CAGE NO 3CVE1 | DRAWING NO G5Ant-1AS1 | REV
SCALE 1/1 | SHEET 1 OF 1

ORIGINAL DOCUMENT WITH STAMP IS RED