Active L1/L2 Glonass + L1/L2 GPS + OmniStar/TerraStar + 2.4 GHz WiFi Antenna

P/N: G5Ant-3BASRPSF1-24WF

For Buoy, Marines, DeepSea, and Ground Applications

ANTCOM FAA Approved Facility

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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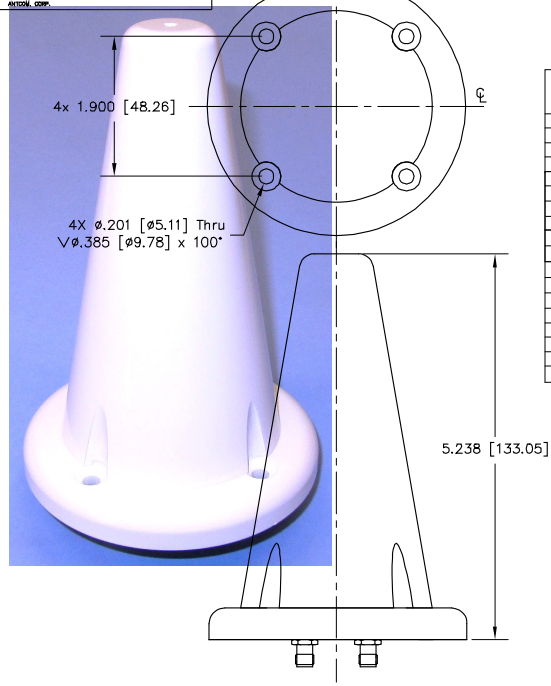

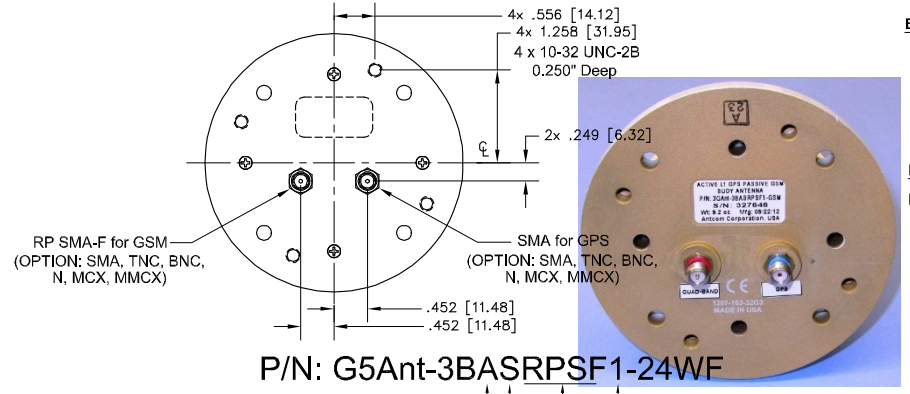

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SPECIFICATIONS

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		WIFI
FREQUENCY:	1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15 MHz		1227.60 ± 12 MHz 1207.14 ± 10 MHz		1252.50 ± 7.5 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 - 1606) MHz		2400 MHz
RADIATION PATTERN:	HEMISPHERICAL												OMNI
POLARIZATION:	RHCP		RHCP		RHCP		RHCP		RHCP		RHCP		VERTICAL
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		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):	- 4	- 3	+ 2.6	+ 3.2	+ 1.8	+ 1.6	+ 1.2	+ 0.8	+ 4.0	+ 3.0	+ 3.7	+ 2.2	
@ 10 ° Elevation:	- 11	- 11	- 3.7	- 3.6	- 4.9	- 5.4	- 6.3	- 5.4	- 3.5	- 3.0	- 4.0	- 4.1	
@ 20 ° Elevation:	- 10	- 10	- 2.8	- 2.2	- 4.1	- 3.7	- 4.6	- 3.8	- 1.9	- 1.5	- 2.5	- 2.6	+3 dBII
@ 30 ° Elevation:	- 9	- 8	- 1.4	- 0.2	- 2.4	- 1.8	- 3.5	- 2.9	- 0.6	- 0.5	- 1.1	- 1.6	
@ 60 - 90 ° Elevation:	> - 6	> - 5	> + 1.4	> + 2.2	> + 0.5	> + 0.6	> - 0.2	> + 0.2	> + 2.6	> + 2.4	> + 2.2	> + 1.5	
BEAM WIDTH (3dB):	95 Deg.	100 Deg.	100 Deg.	107 Deg.	95 Deg.	105 Deg.	90 Deg.	100 Deg.	90 Deg.	105 Deg.	85 Deg.	100 Deg.	
AXIAL RATIO:	3 dB	3 dB	1.5 dB	1.5 dB	1 dB	1 dB	3 dB	1 dB	1 dB	1 dB	5 dB	2.5 dB	
LIGHTNING PROTECTION:	DC GROUNDING												
LNA GAIN:	35 dB		35 dB		35 dB		33 dB		33 dB		33 dB		N/A
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:	DIAMETER: 3.50 in. [88.90 mm] HEIGHT: 5.24 in. [133.05 mm]
WEIGHT:	12.4 oz. (351 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541F CLASS 1A
COLOR:	GLOSS WHITE #17925 PER FED-STD-595B
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	SMA FEMALE / RP SMA FEMALE (OPTION: SMA, TNC, BNC, N, MCX, MMCX)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C] (Operational) -85 °F TO +302 °F [-65 °C TO +150 °C] (Storage)
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLY SEAL
HAILSTONES:	< 0.5" Dia.

FEDERAL & MILITARY SPECIFICATIONS:

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

QUANTITY REQD	PARTS LIST		ITEM NO
	DESCRIPTION	PART NO	
1	O-Ring or GASKET, Item 550 or Item 541	2-031/N756-75 or 3G15P1001-3G	1
4	PANHEAD SCREW, 10-32, 1.25" L, Item 579GN	93085A835	2

SIZE:		LNA:	CABLE'S LENGTH:	GPS/GSM CONNECTOR:	COLOR:
1: 2" SQ.	4: MINI ARINC	A: WITH LNA	X: NO CABLE	S: SMA; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ.	42: ARINC 743	P: WITHOUT LNA		RPSF: Reversed Polarity SMA Female	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA.	52: 2.6" DIA. ON 5" GROUND PLANE			M: MCX; MM: MMCX	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
3: 3.5" DIA.	72: 7" DIA. CHOKE RING			N: N, NB: N-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
3B: 3.5" Dia/Buoy Radome				T: TNC, TB: TNC-Bulkhead	-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 Ø ∅.005. MACHINED SURFACES 125. DO NOT SCALE DRAWING.

ORIGINALLY DRAWN	S. HUYNH	Feb-17-14
ORIGINALLY DESIGN	S. HUYNH	Feb-17-14
UPDATE DRAWN	P. TRAN	Feb-23-17
UPDATE DESIGN	S. HUYNH	Feb-23-17
APPROVED	S. HUYNH	Feb-23-17

ANTCOM CORP. TORRANCE CALIFORNIA

3.5in Dia. L1L2Glonass/L1L2GPS/OmniStar & 2.4GHz WIFI Antenna

SIZE: D | CAGE NO: 3CVE1 | DRAWING NO: G5Ant-3BASRPSF1-24WF | REV: –

SCALE 1/1 | SHEET 1 OF 1

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED