



FAA Approved Facility

New 4-Ports Combined Dual G5 + Thuraya + Inmarsat-Iridium Antenna

For Deep-Sea Applications

P/N: 5GG5G5TIR-AAP2-XS4-2

Other Frequencies and Connectors are Available

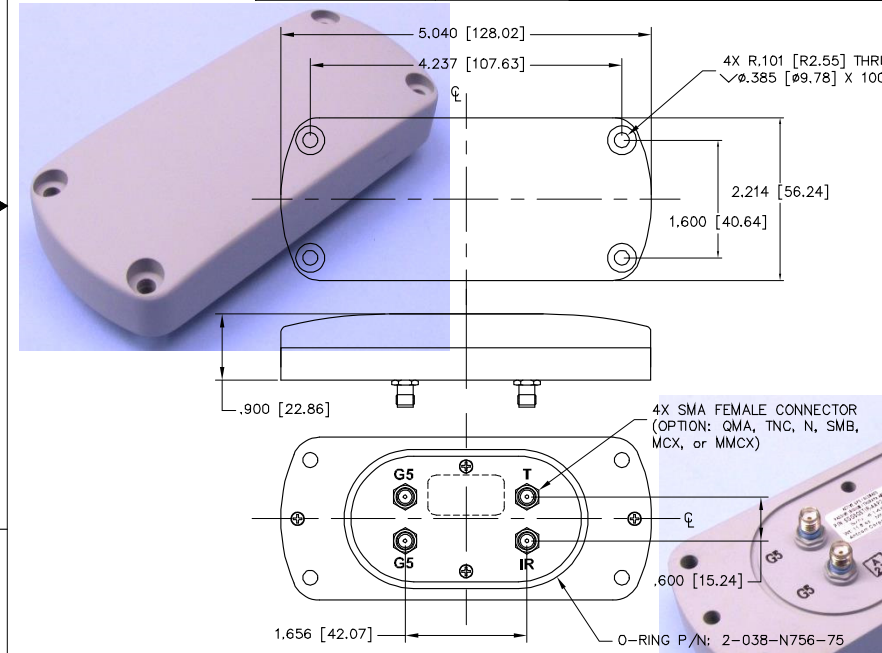
Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>



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

		ELECTRICAL SPECIFICATIONS												REVISIONS							
		L5 GPS				L2 GPS		L2 GLONASS		OmniSTAR / L-Band		L1 GPS		L1 GLONASS		Rx Inmarsat		IRIDIUM		Tx Inmarsat	
		E5, E5a, E5b Galileo L5 IRNSS				B2 Compass		E6 Galileo B3 Compass		L6 Galileo L1 IRNSS		E1, E2 Galileo L1 IRNSS		(1598 - 1606) MHz		(1542.5 ± 17.5) MHz		(1609 - 1626) MHz		(1642.5 ± 17.5) MHz	
FREQUENCY:		1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15 MHz				1227.60 ± 12 MHz 1207.14 ± 10 MHz		1262.50 ± 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									
RADIATION PATTERN:		HEMISPHERICAL																			
POLARIZATION:		RHCP				RHCP		RHCP		RHCP		RHCP		RHCP		RHCP/LHCP		RHCP		RHCP/LHCP	
VSWR:		< 2.0:1				< 2.0:1		< 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		50 ohms		50 ohms	
ANTENNA GAIN (dBi):		Free Space		4 ft G.P.		Free Space		4 ft G.P.		Free Space		4 ft G.P.		Free Space		4 ft G.P.		Free Space		4 ft G.P.	
@ 30° (ZENITH):		-3	-3	+3.1	+4.8	+1.5	+2.4	+1.0	-2.0	+3.3	+2.0	+2.7	+1.4	+3.3	+0.5	+6.4	+3.9	+8.0	+4.1	+4.1	
@ 10° Elevation:		-10	-10	-3.9	-3.5	-5.8	-6.3	-5.5	-5.1	-3.0	-2.5	-3.7	-3.4	-3.9	-5.0	-0.7	-2.3	-1.0	-2.4	-2.4	
@ 20° Elevation:		-9	-7	-2.3	-0.3	-3.9	-3.2	-3.9	-1.9	-1.6	+0.4	-2.5	-0.5	-2.3	+0.7	+0.9	+2.3	+0.7	+0.7	+0.7	
@ 30° Elevation:		-7	-5	-0.4	+1.8	-2.1	-1.2	-3.3	-0.5	-0.8	+1.6	-1.5	+0.5	-1.1	+0.4	+1.9	+2.2	+3.4	+1.7	+1.7	
@ 60 - 90° Elevation:		> +4	> -4	> 2.0	> 2.6	> 0.3	> -0.1	> +0.3	> -0.5	> +2.6	> +1.6	> +2.0	> -0.2	> +2.4	> +1.4	> +5.6	> +2.5	> +6.9	> +1.9	> +1.9	
BEAM WIDTH (3dB):		100 Deg.	120 Deg.	105 Deg.	115 Deg.	100 Deg.	110 Deg.	95 Deg.	145 Deg.	100 Deg.	150 Deg.	100 Deg.	145 Deg.	100 Deg.	135 Deg.	92 Deg.	140 Deg.	90 Deg.	130 Deg.	130 Deg.	
AXIAL RATIO:		3 dB	2 dB	1 dB	1 dB	1 dB	2 dB	1 dB	2 dB	1 dB	1 dB	1.5 dB	3 dB	1 dB	1.5 dB	1.5 dB	1.5 dB	2.0 dB	2.0 dB	2.0 dB	
LIGHTNING PROTECTION:		DC GROUNDING																			
LNA GAIN:		35 dB				35 dB		35 dB		33 dB		33 dB		33 dB		33 dB		33 dB		33 dB	
LNA NOISE FIGURE:		3.0 dB				3.0 dB		3.0 dB		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		+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 (-ΔL)																			



MECHANICAL:

SIZE: WIDTH: 2.214 in. [56.24 mm], LENGTH: 5.040 in [128.02 mm], HEIGHT: 0.900in. [22.86 mm]

WEIGHT: 11.6 oz. (329 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5441F

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, or Cable)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]

ALTITUDE: 70,000 ft.

VIBRATION: > 30 G's

LEAKAGE: HERMETICALLY SEALED

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

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

FREQ. BAND (MHz):	GPS LNA:	CONNECTOR:	COLOR:
09 - 876-990	A: WITH LNA	S: SMA; G5/M4	-1: GLOSS WHITE #17925 PER FED-STD-595B
16- 1610 - 1626	P: WITHOUT LNA	M: MCX; MM; MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
18 - 1710-1880	A2: WITH 20dB LNA	N: N; T: TNC	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
19 - 1850-1990	G5: L5 & L1L2 GPS & L1L2 Glonass/Omnistar	SMB: SMB	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
23 - 2200 - 2400			-5: DESERT TAN #33446 PER FED-STD-595B
25 - 2400 - 2500			
15: L1			
12: L1/L2			
G3			
G5			

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	REV
4	FLATHEAD SCREWS, 10-32, 1" L, Item 579	MS24693-C276		2
1	O-RING, Item 552	2-038-N756-75		1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ANGLES	ORIGINAL DRAWN	S. HUYNH	Feb-17-09
TOLERANCE 3/16 PER ANSI Y14.5	ORIGINALLY DESIGNED	S. HUYNH <td>Feb-17-09</td>	Feb-17-09
BREAK ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED	UPDATED	S. HUYNH <td>Feb-24-14</td>	Feb-24-14
FILES IN USE PER CAD	UPDATE DRAWN	P. TRAN <td>Feb-24-14</td>	Feb-24-14
DO NOT SCALE DRAWING	APPROVED	S. HUYNH <td>Feb-24-14</td>	Feb-24-14

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ANTCOM CORP. TORRANCE, CALIFORNIA

Combined Dual G5 & Thuraya & Inmarsat/Iridium Antenna

SCALE 1/1

SHEET 1 OF 1