



# Active L1 GPS / Passive Iridium Antenna

## P/N: 42GL1IR-AP-16TT-1 (with 16in TNC Male Cables, White)

Arinc 743 Configuration. Other Frequencies, Colors, Connectors and Connector Locations are Available

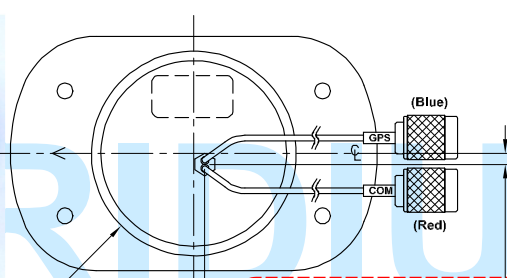
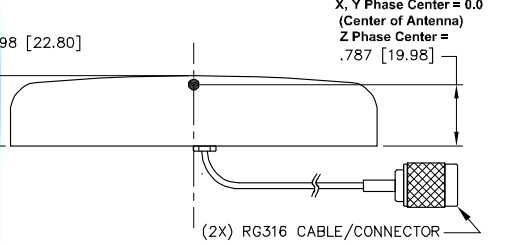
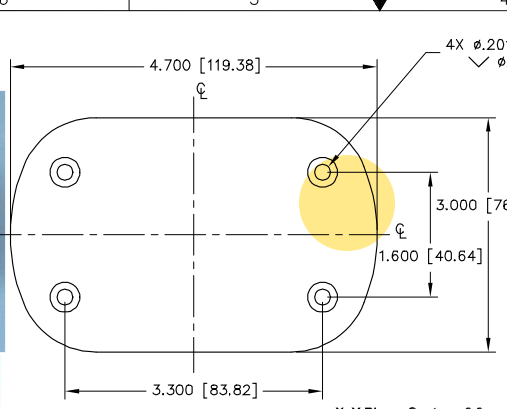
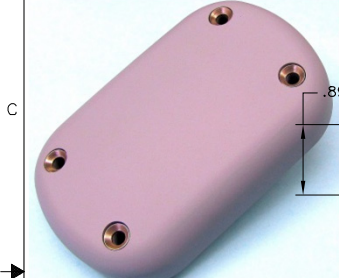


ISO 9001:2008/FAA Approved Facility

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

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Y = 0	Y = 0	Y = 0
X = -.200 [5.07]	X = -.610 [15.48]	X = 0

### SPECIFICATIONS

ZONE	REV	REVISIONS		
		DESCRIPTION	DATE	APPROVED

### ELECTRICAL:

	IRIDIUM	GPS
FREQUENCY:	(1610.0 - 1626.5) MHz	L1: (1575.42 ±13)
RADIATION PATTERN:	HEMISPHERICAL	HEMISPHERICAL
POLARIZATION:	RHCP	RHCP
VSWR:	< 2.0:1	< 1.5:1
GAIN (dB):	4 ft G.P., Free Space	F.S., 4 ft G.P
@ 90° (Zenith):	+4.9	+5.0
@ 10° Elevation:	-1.0	-2.5
@ 20° Elevation:	+1.5	-0.5
@ 30° Elevation:	+2.4	+1.0
@ 60° to 90° Elevation:	>+3.3	>+2.7
BEAM WIDTH (3dB):	129°	96°-106°
AXIAL RATIO @ Zenith:	2 dB	2 dB
POWER HANDLING:	30 W	1 Watt
LIGHTNING PROTECTION:	DC GROUNDING	DC GROUNDING
FILTER (REJ. @1616 MHz):		> 60 dB
LNA GAIN:	N/A	(33.0±1.0) dB
LNA P 1dB Out:	N/A	+16 dBm
LNA NOISE FIGURE:	N/A	2.8 dB (Filter loss is Included)
VOLTAGE/CURRENT:	N/A	(+2.8 TO +28) Volts DC / (30 TO 50) mA

### MECHANICAL:

**SIZE:** 4.70 in. [119.4mm] X 3.00 in. [76.2 mm]  
**HEIGHT:** .898 in [22.80 mm]  
**WEIGHT:** 11.6 oz. (328.8 g)  
**FINISH:** SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541F CLASS 3  
**MATERIAL:** 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT  
**CONNECTOR:** (2X) RG316 CABLE/ TNC CONNECTOR (OPTION: SMA, QMA, MCX, MMCX, N)

### 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

QUANTITY	DESCRIPTION	PART NO	FINISH	NEW
4	Mounting Screw: 10-32, 2.0"	MS24693C284	-	3
1	O-Ring or Gasket	2-142/N756-75, Item 551t	-	2
				1

CONFIGURATION:	FREQ. BAND:	GPS/IRIDIUM LNA:	CABLE'S LENGTH:	MALE CONNECTOR:	COLOR:
1: 2" SO. (FLAT)	L1IR: L1 GPS & IRIDIUM	A: WITH LNA	I: NO CABLE	S: SMA; P: PINN	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.5: 1.9" SO. (FLAT)	1216; L1/L2 GPS	P: WITHOUT LNA	M: WITH MAG. MOUNT	M: MCX; MM; MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)			#: CABLE LENGTH (IN)	N: N; NB: Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
3: 3.5" DIA. (FLAT)			R: RIGHT ANGLE CON.	T: TNC; TB: TNC- Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)					-5: DESERT TAN #33446 PER FED-STD-595B
53: (HELIX ROD)					
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS SHOULD BE ANGLES ± 1/64 DECIMAL ± .010  
 TOLERANCE .5% PER ANSI Y14.5  
 BREAK EXTERNAL EDGES .008 TO .015  
 SURF. FINISH PER MIL-C-26000  
 DIM'S ON A DIMENSION ± .005  
 MACHINED SURFACES  
 DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA  
 FLAT FIXED MOUNT  
 ACTIVE L1 GPS/IRIDIUM  
 ANTENNA

DATE: 3CVE1  
 P/N: 42GL1IR-AP-XTT-X-X  
 SCALE: 1/1  
 SHEET: 1 OF 1

NMO Connector is Now Available for Some Antennas