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## Active L1/L2 GPS & Iridium Antenna: Flat mount, P/N: See table:

### SPECIFICATIONS

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
3.0	Added Manufacturer Part Numbers. FCH0551.	06-Nov-2013	F. Telsell
4.0	Added Note on "F" in Manufacturer's P/N's. FCH0819.	25-Jul-2014	J.Glasgow
5.0	Corrected mounting hole description. FCH0711.	16-Feb-2017	J.Glasgow

### ELECTRICAL:

	IRIDIUM	GPS
FREQUENCY:	(1610.0 - 1626.5) MHz	L1: (1575.42 ±13)
RADIATION PATTERN:	HEMISPHERICAL	HEMISPHERICAL
POLARIZATION:	RHCP	RHCP
VSWR:	< 1.5:1	< 1.5:1
GAIN (dB):	4 ft G.P. Free Space	F.S. 4 ft G.P
@ 90° (Zenith):	+4.9 +5.0	+4.6 +2.9
@ 10° Elevation:	-1.0 -2.5	-2.5 -1.8
@ 20° Elevation:	+1.5 -0.5	-1.1 +0.7
@ 30° Elevation:	+2.4 +1.0	+0.5 +1.7
@ 60° to 90° Elevation:	>+3.3 >+2.7	>3.6 >2.1
BEAM WIDTH (3dB):	129 ° 98 °-106 °	103 ° 146 °
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, 20dB (-A2- Option)
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:** WIDTH: 2.20 in. [55.88 mm], LENGTH: 5.026 in [127.66 mm], HEIGHT: 0.721 in. [18.31 mm]

**WEIGHT:** 8.3 oz (235 g)

**FINISH:** SKYDROL RESISTANT POLYURETHANE ENAMEL, AND NICKEL PLATING

**MATERIAL:** 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, AND SKYDROL RESISTANCE, FIRE RETARDANT

**CONNECTOR:** IRIDIUM: TNC FEMALE (J1, Red); GPS: BNC FEMALE (J2, Blue)

**MOUNTING:** FLAT FIXED MOUNT; O-RING & 4 x 10-32 MOUNTING SCREWS PROVIDED

### ENVIRONMENTAL:

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

**ALTITUDE:** 70,000 ft.

**VIBRATION:** > 30 G's

**LEAKAGE:** HERMETICALLY SEALED

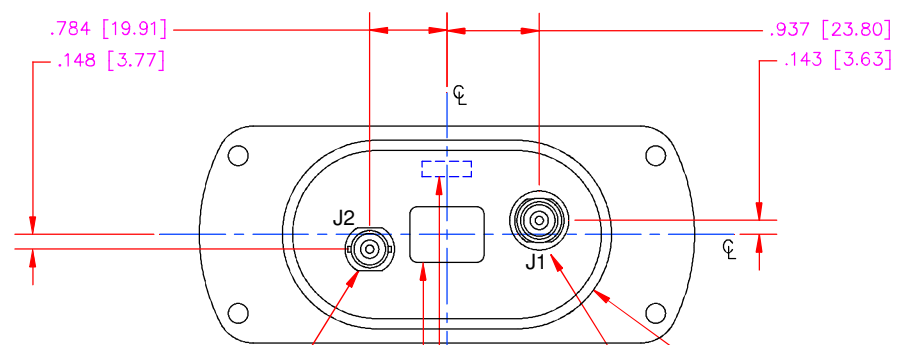
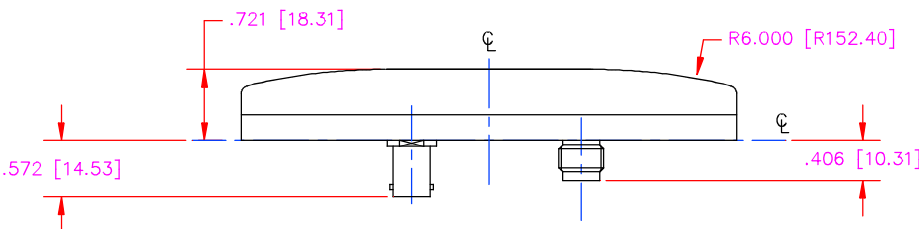
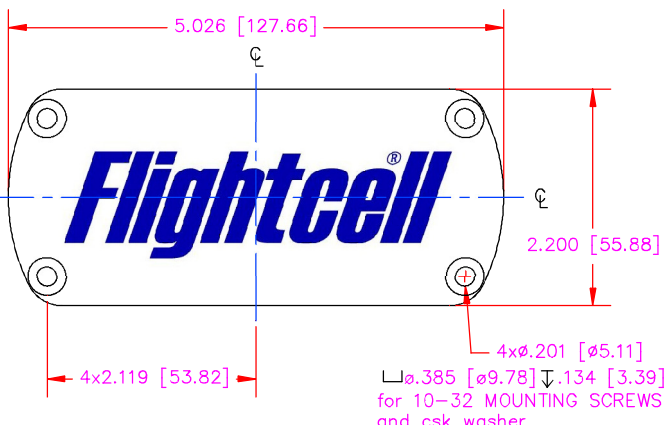
### FEDERAL & MILITARY SPECIFICATIONS:

### DESIGN TO:

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

QUANTITY REQD	DESCRIPTION	PART NO	MATERIAL	FINISH	ITEM NO
4	MOUNTING SCREW: (10-32, 1")	MS24693C276	-	-	3
4	WASHER: CSK #.370 x 100' .110 THICK	3G15P1001-70	-	-	2
1	O-RING	2-038-N756-75	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		DRAWN		Flightcell International Ltd NELSON NEW ZEALAND	
FRACTIONS	± 1/64	DECIMALS	± 0.005	J.GLASGOW	16-FEB-17
ANGLES	± 1'	ANGLES	± 1'	J.MACE	16-FEB-17
TOLERANCE SYM PER ANSI Y14.5		CHECKED		ENGINEER	
REMOVE ALL BURRS		APPROVED		J.GLASGOW	
BREAK EXTERNAL EDGES .005 TO .015		CAD FILE NO		SCALE 1/1	
FILLETS R .005 TO R .030		SHEET NO		DRW_ANP_001	
SCREW THREADS PER MIL-STD-8879		REV		2.0	
DIA'S ON A CONE & .005		SHEET		1 OF 1	
MACHINED SURFACES		DO NOT SCALE DRAWING			



GPS: BNC Female (J2, Blue) DATE STAMP/ NAMEPLATE Iridium: TNC Female (J1, Red)

**(+2.5 to +30) Volts DC**

FLIGHTCELL P/N: DESCRIPTION:	OLD FLIGHTCELL P/N:	COLOR:	MANUFACTURERS P/N:
ANP_00002 L1 GPS (BNC) & IRIDIUM (TNC)	FCANTBNCNCB	LUSTERLESS BLACK #37038 PER FED-STD-595B	S5GIR1516RR-AP-XBT-4(F)
ANP_00003 L1 GPS (BNC) & IRIDIUM (TNC)	ANTDTNCSBNC3VC	GLOSS WHITE #17925 PER FED-STD-595B	S5GIR1516RR-AP-XBT-1(F)
ANP_00004 L1 GPS (SMA) & IRIDIUM (TNC)	ANTDTNCSMA3VC	GLOSS WHITE #17925 PER FED-STD-595B	S5GIR1516RR-AP-XBT-1(F)
ANP_00011 L1 GPS (SMA) & IRIDIUM (TNC) with TSO Certification.	-	GLOSS WHITE #17925 PER FED-STD-595B	5G1516RR-AP-XBT-1(F)
ANP_00012 L1 GPS (BNC) & IRIDIUM (TNC) with TSO Certification.	-	GLOSS WHITE #17925 PER FED-STD-595B	5G1516RR-AP-XBT-1(F)
ANP_00014 L1 GPS (BNC) & IRIDIUM (TNC) with TSO Certification.	-	LUSTERLESS BLACK #37038 PER FED-STD-595B	5G1516RR-AP-XBT-4(F)
ANP_00016 L1/L2 GPS (BNC) & IRIDIUM (TNC).	-	GLOSS WHITE #17925 PER FED-STD-595B	S5GIR1216RR-AP-XBT-1(F)

NOTES: UNLESS OTHERWISE SPECIFIED:  
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]  
2. ALL SCREWS ARE SUPPLIED BY FLIGHTCELL  
3. THE "F" AT THE END OF MANUFACTURERS P/N IS OPTIONAL AND ONLY PRESENT ON PARTS THAT HAVE HAD FLIGHTCELL LOGO PRINTED BY MANUFACTURER