



**(+2.8 to +28) Volts DC**

**SPECIFICATIONS**

**ELECTRICAL:**

|                              | DUAL IRIDIUM          | GPS                                    |           |
|------------------------------|-----------------------|----------------------------------------|-----------|
| <b>FREQUENCY:</b>            | (1610.0 - 1626.5) MHz | (1575.4 ±13) MHz                       |           |
| <b>RADIATION PATTERN:</b>    | HEMISPHERICAL         |                                        |           |
| <b>POLARIZATION</b>          | RHPC                  |                                        |           |
| <b>VSWR:</b>                 | <2:1                  |                                        |           |
| <b>IMPEDANCE:</b>            | 50Ω                   |                                        |           |
| <b>ANTENNA GAIN (dBic):</b>  | Free Space            | Free Space                             | 4 ft. G.P |
| @90° (ZENITH):               | 0                     | +4.6                                   | +2.9      |
| @10° Elevation:              | -7.5                  | -2.5                                   | -1.8      |
| @20° Elevation:              | -5.5                  | -1.1                                   | +0.7      |
| @30° Elevation:              | -4.0                  | +0.5                                   | +1.7      |
| @60 - 90° Elevation:         | -2.3                  | > 3.6                                  | > 2.1     |
| <b>BEAM WIDTH (3dB):</b>     | 98°-106°              | 103°                                   | 146°      |
| <b>AXIAL RATIO @ Zenith:</b> | 2 dB                  |                                        |           |
| <b>POWER HANDLING:</b>       | 30 W                  | 1 Watt                                 |           |
| <b>LIGHTNING PROTECTION:</b> | DC GROUNDING          |                                        |           |
| <b>FILTER:</b>               | 2 2-POL               |                                        |           |
| <b>LNA GAIN:</b>             | N/A                   | (33.0+/-1.0)dB                         |           |
| <b>LNA P 1dB Out:</b>        | N/A                   | +16 dBm                                |           |
| <b>LNA NOISE FIGURE:</b>     | N/A                   | 2.9 dB (filter loss is included)       |           |
| <b>VOLTAGE/CURRENT:</b>      | 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:** 0.913 in. [23 mm]  
**WEIGHT:** <10 oz. (283g)  
**FINISH:** SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDITE PER MIL-C-5541F  
**MATERIAL:** 6061-T6 ALUMINUM ALLOY BASE  
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,  
 SKYDROL RESISTANCE, AND FIRE RETARDANT  
**CONNECTOR:** GPS: BNC-F (Blue). IRIDIUM: TNC-F (Red), IRIDIUM: TNC-F (Red)  
**MOUNTING:** FLAT FIXED MOUNT; O-RING, WASHER &  
 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, DO-228, MIL-C-5541, MIL-S-901D/MIL-STD-167  
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

| QUANTITY REQD | DESCRIPTION                                 | PART NO       | FINISH | ITEM NO |
|---------------|---------------------------------------------|---------------|--------|---------|
| 4             | MOUNTING WASHER: √ φ.370 x 100* .110 THICK  | 3G15P1001-70  |        | 3       |
| 4             | MOUNTING SCREWS: 10-32, 100* FLAT HEAD 1.5" | MS24693C280   |        | 2       |
| 1             | O-RING                                      | 2-038-N756-75 | -      | 1       |

| FLIGHTCELL P/N: | DESCRIPTION:                                                          | MANUFACTURERS P/N:        | COLOR:                              |
|-----------------|-----------------------------------------------------------------------|---------------------------|-------------------------------------|
| ANP_00038       | 3 Port Flat Antenna L1 GPS/Iridium/Iridium BNC/TNC/TNC White TSO Cert | S5GIR151616RRR-APP-XBTT-1 | GLOSS WHITE #17925 PER FED-STD-595B |

NOTES: UNLESS OTHERWISE SPECIFIED:  
 1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]  
 2. ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

| REV | DESCRIPTION                | DATE     | APPD |
|-----|----------------------------|----------|------|
| 1.0 | Updated Antcom part number | 10/04/18 | HB   |
| 1.0 | Initial Drawing Release.   | 02/02/18 | HB   |

GENERAL LIMITS (UNLESS STATED)  
 LINEAR: 0.XX +/- .030  
 0.XXX +/- .015  
 ANGLES: +/- 1°  
 ALL DIMENSIONS IN INCHES



DO NOT SCALE OFF DRAWING  
 IF IN DOUBT ASK!  
 DRAWN: HB  
 CHK'D: JG  
 APPV'D: JG  
 ORIGINAL SCALE: 1:1  
 DRAWING SIZE: A3



| TITLE:                   | PART NO:        | VERSION: |
|--------------------------|-----------------|----------|
| Dual Iridium/GPS Antenna | ANP_00038       | 1.0      |
| PROJECT:                 | FLIGHTCELL DZMx |          |
| DWG NO:                  | DRW_ANP_007     |          |