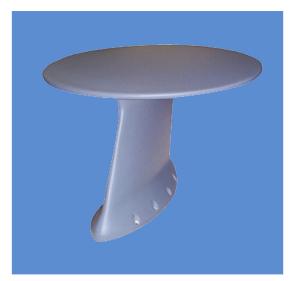
## UHF/Satcom/GPS/Iridium S65-8282-186



## **DESCRIPTION**

**S65-8282-186:** UHF Satellite communications antenna provides four functions from a single, low-profile footprint. The traditional low-angle, vertically-polarized blade section is used for air-to-air and air-to-ground UHF communications. The high-angle RHCP element is designed for UHF Satcom. The broad cardioid pattern provides coverage for up to plus or minus 35 degrees from zenith.

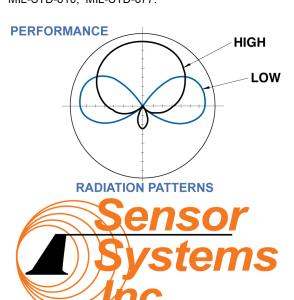
An L1/L2 GPS with a 26.5dB amplifier is housed in the radome along with an Iridium element for voice and data applications. Each antenna section has separate connectors for ease of installation and to eliminate the requirement for diplexers.

The S65-8282-186 is approved as Iridium Compatible Equipment (ICE).

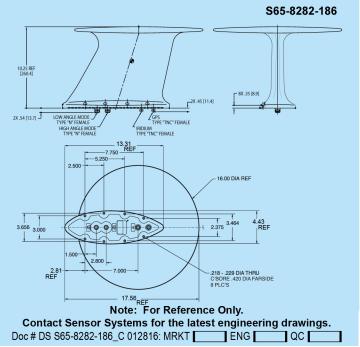
**CERTIFIED** 

NSN: 5985-01-597-0009.

FEDERAL & MILITARY SPECS: MIL-HDBK-5400, MIL-STD-810, MIL-STD-877.



| SPECIFICATIONS |   |
|----------------|---|
| MODEL          | S65-8282-186  |
| ELECTRICAL     |   |
| Frequency      | 240-400 MHz (high angle UHF Satcom)<br>225-400 MHz (low angle UHF)<br>1565-1586 MHz (L1 GPS)<br>1217-1238 MHz (L2 GPS)                                  |
| VSWR           | 1618-1626.5 MHz (Iridium) 2.0:1 (high angle UHFSatcom) 2.0:1 (low angle UHF and GPS)  |
|                | 1.5:1 (Iridium)   |
| Pattern        | Cardioid Hemispheric RHCP<br>(high angle UHFSatcom)<br>Omnidirectional in Azimuth<br>Cosinusoidal in Elevation (low angle UHF)                          |
| Polarization   | RHCP<br>(high angle UHFSatcom, GPS, and Iridium)<br>Vertical (low angle UHF)  |
| Impedance      | 50 Ohms   |
| Power          | 125 Continuous Watts (high angle UHFSatcom) 125 Continuous Watts (low angle UHF) 1 Watt (GPS) 60 Continuous Watts (Iridium)                             |
| Gain           | +3 dBic min, +7 dBic peak @ zenith<br>(high angle UHFSatcom)<br>0 dBil min @ horizon, +2 dBil peak (low angle UHF)<br>26.5 dBic (GPS L1/L2 and Iridium) |
| MECHANICAL     |   |
| Weight         | 8.9 lbs [4.02 kg]   |
| Height         | 10.25 in max [260.4 mm]   |
| Diameter       | 16.0 in.  |
| Material       | 6061-T6 Aluminum Alloy / Fiberglass   |
| Finish         | Skydrol Resistant Polyurethane Enamel   |
| Connector      | N Female (x2) / TNC Female (x2)   |
| Drag           | 2.8 lbs. Mach .85 @ 35,000 ft.  |
| ENVIRONMENTAL  |   |
| Temperature    | -61°C (-77°F) to 85°C (+185°F)  |
| Altitude       | 50,000 ft.  |



Sensor Systems, Inc. 8929 Fullbright Ave., Chatsworth, CA 91311 Ph: 818-341-5366 Fax: 818-341-9059 Email: productinfo@sensorantennas.com www.sensorantennas.com