

Trident Sensors' Active GPS Antenna

D.G. O'Brien / Feed-through



Features

- Pressure rated to 6,000 m
- Active GPS antenna element
- Rapid position acquisition at the sea-surface
- Small, light-weight, low drag

D.G. O'Brien Connection

- Allows antenna to be mounted independently of electronics
- Straight or right-angled cable assemblies available

Feed-through Connection

- For antenna mounting directly onto pressure housing
- 7/16" UNF thread

Applications

- AUVs
- ROVs
- Drifters
- Profiling floats
- Manned submersibles
- Location & recovery



128 mm D.G. O'Brien Active GPS Antenna

| | |
|---------------------|---------------------|
| Type | Quadrifilar Helix |
| Frequency | 1573.42-1577.42 MHz |
| Polarization | Right-hand circular |
| Voltage | 2.8 to 3.6 V |
| Current | 13 mA |
| Gain | +24 dBic |
| Beamwidth | 135 Degrees |
| Bandwidth | 20 MHz |
| Axial Ratio | <0.5 @Zenith |
| VSWR | <2.0:1 |
| Impedance | 50 |
| Temperature | -40 to +85 °C |



Active GPS Feed-through Antenna Mounted Directly onto Pressure Housing

| | Active GPS Only | D.G.O. Active GPS Only |
|------------------------------|------------------------------------|------------------------|
| Length (excl. thread) | 100 mm | 126 mm |
| Diameter (housing) | 25 mm | 25 mm |
| Thread Length | 19 mm | 12 mm |
| Thread | 7/16" - 20 UNF | 5/8" - 18 UNF |
| Weight* | ~90 g | ~135 g |
| Face-seal O-ring | BS017 (17.17 id x 1.78 mm section) | N/A |
| Cable* | RG-316 | RG-58, CN-4 |
| GPS Connectors* | MCX or SMA Plug | Coax 1131016-101 |

* Approximate values as customers' requirements vary. Please specify desired cable length & connectors. Other connectors may be available.

