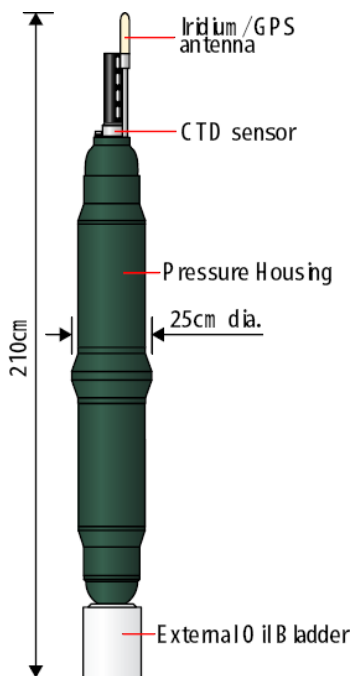


# Trident Sensors' Deep Sea Antennas for GPS & Iridium Applications

GPS & Iridium 6,000 m antennas are designed for submersible vehicles, profiling floats & drifters to enable location, recovery & two-way Iridium satellite data communications at the sea surface.



## Global GPS & Iridium Communications

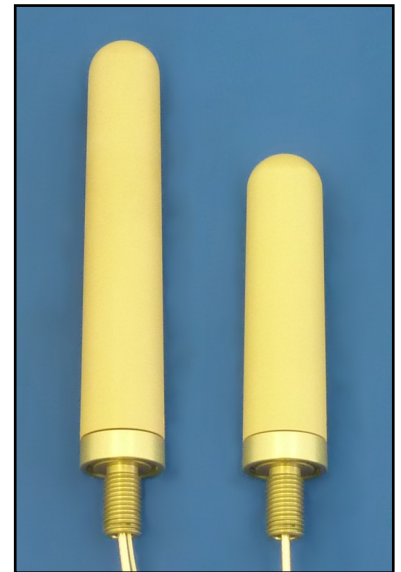


JAMSTEC 4,000 m Deep NINJA Profiling Float with Trident Sensors' Combined Deep Sea Antenna

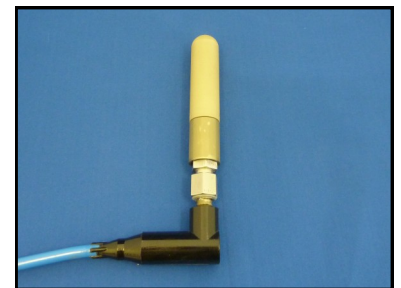
- GPS provides location at the sea surface.
- Iridium element allows real-time, two-way data communications.
- Various cable lengths available with a choice of GPS & Iridium connectors.
- Teledyne D.G. O'Brien 50 Ohm coax connector version for cable mount.
- Pressure rated to 6,000 m.
- Small, lightweight, low drag.

## Applications

- AUVs
- ROVs
- Drifters
- Profiling floats
- Manned submersibles
- Location & recovery
- Mission data transmission
- Command & control



150 mm Combined Antenna (left)  
105 mm Single Element Antenna (right)



128 mm D.G. O'Brien Single Element Antenna with cable for installation remote from electronics

|                       | Active GPS & Passive Iridium       | Active GPS Only                    | Passive Iridium Only               | Passive GPS & Passive Iridium                           | D.G.O. Active GPS Only | D.G.O. Passive Iridium Only | D.G.O. Passive GPS & Passive Iridium                     |
|-----------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------------------------------------|------------------------|-----------------------------|----------------------------------------------------------|
| Length (excl. thread) | 150 mm                             | 105 mm                             | 105 mm                             | 105 mm                                                  | 128 mm                 | 128 mm                      | 128 mm                                                   |
| Diameter (housing)    | 25 mm                              | 25 mm                              | 25 mm                              | 25 mm                                                   | 25 mm                  | 25 mm                       | 25 mm                                                    |
| Thread Length         | 19 mm                              | 19 mm                              | 19 mm                              | 19 mm                                                   | 12 mm                  | 12 mm                       | 12 mm                                                    |
| Thread                | 7/16" - 20 UNF                     | 7/16" - 20 UNF                     | 7/16" - 20 UNF                     | 7/16" - 20 UNF                                          | 5/8" - 18 UNF          | 5/8" - 18 UNF               | 5/8" - 18 UNF                                            |
| Weight*               | ~130 g                             | ~90 g                              | ~90 g                              | ~90 g                                                   | ~135 g                 | ~135 g                      | ~135 g                                                   |
| Face-seal O-ring      | BS017 (17.17 id x 1.78 mm section) | BS017 (17.17 id x 1.78 mm section) | BS017 (17.17 id x 1.78 mm section) | BS017 (17.17 id x 1.78 mm section)                      | N/A                    | N/A                         | N/A                                                      |
| Cable*                | Hirose U.FL Coax / RG-316          | RG-316                             | RG-316                             | RG-316                                                  | RG-58, CN-4            | RG-58, CN-4                 | RG-58, CN-4                                              |
| GPS Connectors*       | MCX or SMA Plug                    |                                    |                                    | MCX or SMA Plug<br>Single element so requires RF switch | Coax 1131016-101       | Coax 1131016-101            | Coax 1131016-101<br>Single element so requires RF switch |
| Iridium Connectors*   | U.FL, MCX or SMA Plug              |                                    |                                    |                                                         |                        |                             |                                                          |

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

