

Trident Sensors' Passive Iridium Antenna

D.G. O'Brien / Feed-through



Features

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

D.G. O'Brien Connection

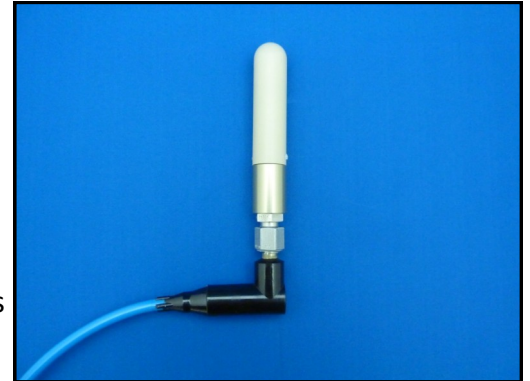
- Allows antenna to be mounted independently of electronics
- Straight or right-angled cable assemblies available

Feed-through Connection

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

Applications

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



128 mm D.G. O'Brien Passive Iridium Antenna

Type	Octafilar Helix
Frequency	1616-1626 MHz
Polarization	Right-hand circular
Gain	+2.0 dBic @ zenith
Efficiency	65% Total spherical
Beamwidth	>120 Degrees
Bandwidth	(1dB) 15 MHz
Axial Ratio	<1.5 @Zenith
VSWR	<2.0:1
Impedance	50
Temperature	-40 to +85 °C



Passive Iridium Feed-through Antenna Mounted Directly onto Pressure Housing

	Passive Iridium Only	D.G.O. Passive Iridium Only
Length (excl. thread)	105 mm	128 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*	Hirose U.FL Coax	RG-58, CN-4
Iridium Connectors*	U.FL, MCX or SMA Plug	Coax 1131016-101

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

