

The 11,000 m Challenger Deep Beacon & Data Communications System



The Challenger Deep Beacon withstands pressures to 11,000 m & enables location & recovery of ROVs & AUVs at the sea surface. AUV mission data are received & missions reprogrammed remotely.

The Challenger Deep Beacon



The Challenger Deep Beacon & Data Communications System

- Spherical glass 11,000 m housing.
- Internal battery allows location & recovery if the vehicle loses power.
- Pressure switch option to activate the beacon near the sea surface.
- Bespoke solutions.
- Serial data & power bulkhead.
- End-to-end service available.



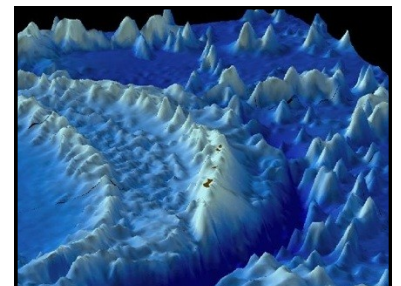
Full ocean depth operations, anywhere in the world
Image courtesy JAMSTEC

Universal Ship's Deck Unit



Universal Ship's Deck Unit

- Enables communications directly with the ship via Iridium where no internet access available.
- Mission data downloaded.
- Missions reprogrammed.
- USB or serial interface available.
- Plugs directly into a PC.
- User interface software provided.



Mariana Trench Bathymetry

Oceanography

Oceanographic customers include:

- NOC, UK
- WHOI, USA
- Met Office, UK
- SAMS, UK
- AWI, Germany
- BAS, UK
- Fugro GEOS
- NASA

Trident Sensors won a Queen's Award for Enterprise 2011: Innovation & is a member of the UK Parliamentary & Scientific Committee.

	Challenger Deep Beacon	Universal Ship's Deck Unit
Dimensions*	190 mm diam.	125 L x 80 W x 45 mm H
Weight*	2300 g	350 g
Battery*	7.6 V, 4.4 Ah Li-ion	3.6 V, 2.2 Ah Li-ion
Input Voltage	9 V to 12 V dc	9 V to 30 V dc
Satellite Transceiver	Iridium 9602	Iridium 9602
GPS	Fastrax	SiRF star
Interface	USB or Serial	USB or Serial
Operating Temperature	-20° C to 60° C	-20° C to 60° C
Pressure Rating	11,000 m	N/A

* Approximate values excluding connectors and antennas as customers' requirements vary.

