



NEW DEEP MOBY PROFILING FLOAT 6000 meters

The DEEP MOBY profiling float designed by OSEAN is an ultra-deep, low-cost, long-lived, platform that mobilizes passively drifting autonomous hydrophones for MERMAID seismology program and CTD for deep Argo program mission.

APPLICATIONS

- Deep ARGO program mission
- MERMAID Seismology Monitoring
- Expanded versatility for other applications

FEATURES

- Autonomy up to 5 years
- Autonomous profile to 6000m (19,685 ft)
- Landing and Park on the sea floor capability
- Iridium/RUDICS Communication and GNSS localization
- One-year continuous recording MERMAID data buffer
- Designed based on a modular structure to facilitate integrating additional sensors
- Rugged Lightweight Housing
- Launch and recovery hook for easy deployment and recovery
- Limited surface time to avoid collisions

TECHNICAL SPECIFICATIONS

MECHANICAL CHARACTERISTICS

Hull	Glass sphere 17"
Overall Length	131 cm with removable IRIDIUM/GPS Antenna
Overall shell diameter	55 cm
Available volume change	5.3%
Weight in Air:	60kg
Depth rating:	6000 meters – 19,685 ft

TELEMETRY

Communication	Iridium/RUDICS
Localization	GNSS WAAS/EGNOS compatible
User software interface	DIAGNOSTIC via Bluetooth (PC / MAC)

PRESSURE SENSOR

Range:	0 – 600 bar
Accuracy:	0.2% FS

DEEP ARGO CTD

Sensors	SBE61 CTD or RBR ^{argo} CTD
Features	Continuous profile on ascent Sampling every hour on drift (pressure, temperature, salinity)

ACOUSTIC MERMAID

Sensor:	Hydrophone
Bandwidth	0.1 Hz to 12 Hz
Sound pressure level	180 dB ref 1 μ Pa (Full scale)
Resolution	24 bits
Sample rate	40 SPS
Data Buffer	1 year of continuous recording

OPERATION

Lifetime perspective	Up to 250 deep ARGO cycle (6000 meters-10 days) Up to 150 deep ARGO & MERMAID cycle (10 days)
Landing capability	Able to park on the sea-floor on request
Power supply	Lithium (Multimodal & IATA Certified) / Alkaline
Operating temperature	-2°C to 35°C
Shipping	Wood shipping crates (international)