



POSIDONIA II

ULTRA-DEEP, LONG-RANGE USBL

POSIDONIA II is a USBL acoustic positioning system for high-accuracy / ultra-long range tracking of subsea vehicles. It offers enhanced performance with a new electronic cabinet (USBL-Box) including the most recent **iXBlue** acoustic signal processing and full compatibility with RAMSES 6000 synthetic baseline positioning system.

FEATURES

- Extreme long-range beyond 10 000 m and 0.2% of slant distance accuracy *
- Low frequency band, full wideband, robust to noise and multipath
- Smoothly interfaces with **iXBlue** positioning building blocks (INS, RAMSES, motion sensors)
- Full Ethernet and **iXBlue** web-based user interface

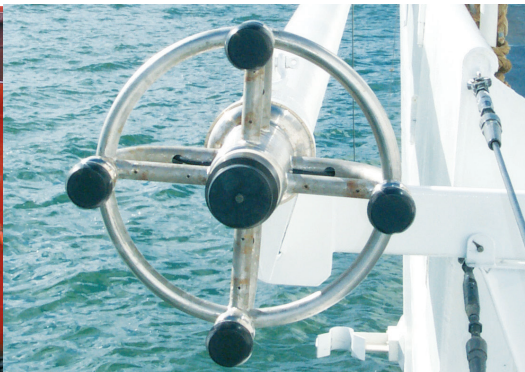
* Performance depends on environment/noise conditions

BENEFITS

- Deep tow operations with no need for second tracking vessel
- High performance even in extremely adverse conditions
- Added flexibility and better performance
- Simple to deploy and operate

APPLICATIONS

- Deep towfish tracking
- AUV, ROV and any deep sea vehicle tracking
- Pipe / cable laying operations



POSIDONIA II

TECHNICAL SPECIFICATIONS

PERFORMANCE ⁽¹⁾

Accuracy	0.2% of slant range
Range	>10 000 m

Optimum performance of **POSIDONIA II** can be achieved when used in conjunction with other **iXBlue** navigation equipment (OCTANS gyrocompass or PHINS/ROVINS inertial navigation system).

A complete and modular navigation solution comprising **POSIDONIA II**, RAMSES 6000 and PHINS/ROVINS offers ultimate performance with high position update rate and robust positioning.

CHARACTERISTICS

	Deployable	Flush
Transmitter		
Source level	190 ± 3 dB ref 1µPa	192 ± 3 dB ref 1µPa
Bandwidth	8 - 14 kHz	8 - 14 kHz
Receiver		
Bandwidth	14 - 18 kHz	14 - 18 kHz
Signal	M-FSK	M-FSK
Height	420 mm	245 mm (without connector)
Width Ø	580 mm	800 mm
Weight in air	34 kg	180 kg

INTERFACES

Man machine interface	iXBlue web-based user interface and DELPH RoadMap display software
Protocols	Industry standard (NMEA0183, binary)
GPS	Any external GPS, DGPS, and RTK receiver
Pitch / roll / heading	Input iXBlue 's inertial sensors and standard sensors
Sound velocity	Sound velocity correction (ray bending, velocity error)
Pressure sensor	External pressure sensor, optional OCEANO transponder sensor
External synchronisation	Input / output

(1) Performance depends on environment / noise conditions