EurOcean_LEXI

EUROPEAN LARGE EXCHANGEABLE EQUIPMENTS

UV Information and Contact	
Name	ROVlatis
Mission Type	Oceanographic Surveys
General Specifications	
Beam (m)	--
Draft (when resurfaced) (m)	--
Frame	Marine-grade Aluminium with detachable toolskid
Tether description	400m 80kN braided vectran fibre carrying 8 fibre-optic channels
Support Vessels Requirements	
Control vane	--
Speed Duration and Range of Operation	
Diving and resurfacing speeds (m/s)	--
Max. cruising range	--
Normal dive duration (hours)	--
Cruising speed (m/s)	--
Max. Speed:	
Forward (m/s)	--
Lateral (m/s)	--
Vertical (m/s)	--
Crew and Scientific Observers	
Scientific observers (number)	--
Pilots (number)	1
Energy	
Total Energy Available:	
Propulsion and steering (kWH)	11
Scientific payload (kWH)	--
Propulsion and Steering	
Thrusters (Thrust Force)	
Aft (N)	--
Lateral (N)	--
Fore (N)	--
Vertical (N)	4
Control planes arrangement	4 vectored horizontal, 4 vertical
Pressure Hull (Manned Sphere)	
Inside diameter (m)	--
Material	--
Portholes	--
Thickness (m)	--

Trim Adjustment and Ballasting	
Trim adjustment and ballasting	1000m depth rated syntactic foam (neutral or positive buoyancy options)
Navigation Equipment	
Non-Acoustic	
Attitude and heading	--
Pressure sensor	CDL Microbath (Digiquartz & precision depth modules)
Acoustic	
Doppler	RDI Workhorse Navigator 600
Altimeter	Reson SVP-24
Longbaseline system	--
Ultrashort baseline system	--
Other equipment	6 horizontal mounted Tritech single beam echosounders for obstacle avoidance. iXSEA PHINS 6000 INS.
Automatic Guidance and Control Capabilities	
Depth control	Provided by MPPT - proprietary Navigation Assistance Toolset integrated with ixSEA PHINS INS, USBL and DVL.
Altitude control (above the seabed)	Provided by MPPT - proprietary Navigation Assistance Toolset integrated with ixSEA PHINS INS, USBL and DVL.
Heading control	Provided by MPPT - proprietary Navigation Assistance Toolset integrated with ixSEA PHINS INS, USBL and DVL.
Speed control	Provided by MPPT - proprietary Navigation Assistance Toolset integrated with ixSEA PHINS INS, USBL and DVL.
Way-point tracking	Provided by MPPT - proprietary Navigation Assistance Toolset integrated with ixSEA PHINS INS, USBL and DVL.
Path following	Provided by MPPT - proprietary Navigation Assistance Toolset integrated with ixSEA PHINS INS, USBL and DVL.
Customer - Defined Instrumentation Support	
Dimensions	--
Power (kW)	--
Communication Links	--
Max. weight in water (kg)	--
Max. weight in air (kg)	100
Scientific Instrumentation and Tools	
Still cameras (number)	4
Lightning (number)	5
Manipulator / Sampling	--
Video cameras (number)	4
Total power (kW)	--
Additional Information	
Examples of missions executed	Sea Trials of with new instrumentation payload. Inspection of Sea Data Buoy (Galway), Dock and inshore water surveys and inspection
Examples of scientific data acquired	--
Other	--