

OBSERVATION CLASS ROV

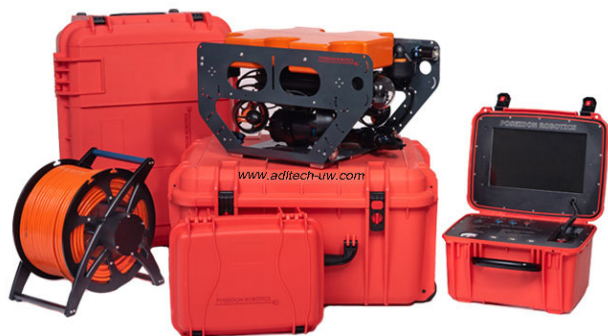
2,2 kW ROV

Poseidon Robotics is a Manufacturer of Remotely Operated Vehicles (ROVs) and other Subsea Systems and Components. We specialize in Inspection Class ROVs, Custom Engineering Solutions for Oil & Gas, and Inshore Inspection Markets.

LANAI Pro ROV

The Lanai Pro ROV builds on the rugged design of the Lanai with a 2kW power supply. It also features a more industrial flight computer/telemetry system/rugged Linux user interface from Mission Robotics with additional HD camera inputs. The Lanai Pro has even more payload space for imaging sonar, scanning sonar, altimeter, CTD, or UT (no tool skid required). Standard equipment: 250m tether/spool, Newton grabber, console/pro controller, spares, and cases.

- ✓ All in one system, everything you need to operate the ROV
- ✓ Lightweight, easy to carry and mobilize into the field or small boats
- ✓ Lots of space and extra payload for customers sensors
- ✓ Ready to interface multiple tools and sensors
- ✓ Designed and built by ROV technicians and operators with more than 20 years on the offshore industry



FEATURES

ROV

- Depth rating: 400m (975m optional)
- Dimensions: 559x356x305mm (LWH)
- Weight in air: 14.7kg
- Payload capacity (fresh water): 2.5kg
- Thruster: 4 lateral (35deg), 4 vertical
- Lights: 6x 1,500 Lumen each
- Advanced Telemetry System:
 - 1x AUX Ethernet (10/100mbps)
 - 4x AUX RS485/RS232/RS422
 - 2x AUX HD video inputs
 - Power: 5/12/24VDC regulated
- Battery mode
- Auto functions

PRO INTEGRATED CONSOLE

- Output voltage: 350-420VDC, 2.2kW
- Input voltage: 100/120/200/240VAC
- Monitor: 22in HD sunlight readable
- Case: 569x353x216mm, 23kg
- Fully isolated output with GFCI/LIM
- Intel i7 with Windows installed
- Aux HDMI monitor output

TETHER

- Breaking strength: 250kg
- Diameter: 9.1mm (neutral saltwater)
- Conductors: 2x21AWG+2TP+Earth

TIME-SYNCHRONIZED VIDEO AND TELEMETRY DATA RECORDING

All data streams (video, vehicle telemetry, and user-added sensors/devices) are time-synchronized and recorded together, allowing for simple post-processing and analysis. Video is recorded as an MP4 file and telemetry is stored as a CSV file.

MP4 files allow for immediate import into video editing tools such as Adobe Premiere Pro. Our freely accessible Python example code provides an immediate path to post-processing dive recordings with ease. Mark important events with the press of a button during your dive, making them easy to find and review later. Pilot audio from the topside device can be recorded, providing additional context for your mission.

Time-Synchronized video and telemetry and data recording. Operational Efficiency because the cost of field operations is typically significantly more than the cost of hardware.

Vehicle telemetry includes leak detection, multiple current and voltage readings, internal pressure, multiple temperature points, and CPU resource usage.

ESC telemetry feedback allows for analysis of individual motor performance. Telemetry parameters include motor RPM, current draw, voltage, and ESC temperature.

The Control Console with the professional hand controller ensures a fast mobilization and everything you need to success on the operation.

Our systems are completely modular and can be adapted to each client requirements from the ROV, sensor and tooling to include; to the console on surface, with multiple monitors, rack mountable, etc.

EQUIPMENT & TOOLING

- 1080 HD IP camera with zoom & $\pm 180^\circ$ tilt
- B/W camera
- Newton manipulator with 97N (at tip) & 124N (In middle) Grip Force
- Multibeam sonar GEMINI 720im
- Microphone
- Depth sensor up to 0.1% error
- Altimeter
- Video is recorded as an MP4 file and telemetry is stored as a CSV file.
- 100mm Parallel Laser (Red dot colour)
- USBL positioning system
- 1 TB Available storage capacity
- Water Sampler

