



## **Data Sheet**

SeaLion-3

**Remote Operated Vehicle** 



- Front and Rear HD cameras
- 1,000 feet (~300m) Depth Rated Housing
- Spare wires in umbilical
- 15.6" LCD panel
- 12.1" LCD touchscreen LCD
- 7 thruster, vectored system
- Two 2200 Lumen LED Lights
- Leak Detection Circuitry

## Performance/Descriptions

- Cameras 2MP IP Board Camera with DOL WDR
- Main Monitor 15.6" TFT Active Matrix LCD Panel, 1920 x 1080 Full HD
- Secondary Monitor 12.1" TFT Active Matrix LCD touchscreen
- Lighting 2 dimmable, high intensity LEDS (2200 lumens each) on front
- Operating Depth 1,000 feet (~300m)
- Power requirements 120vc 15amp in USA; 220vc 8amp in Europe, max w1500 watts
- Included on screen display basic display for time, date and GPS
- Included compass, depth and temperature sensors
- Included auto depth control sensors

## **Dimensions / Weights**

- SeaLion 29"L x 20"W x 13"H 45 lbs.
- Control Box 17"L x 12"W x 8.5"H 23 lbs.
- Cable 0.6"D x 250' to 1500' 30/180 lbs., neutrally buoyant

## **Options**

- Up to 1,500 feet (~450m) of cable
- Cable reel with slip ring (CMS1/2)
- Spare parts kit
- Manipulator arm
- SCAN-650 scanning sonar

The SeaLion-3 is the 3<sup>rd</sup> generation of the popular SeaLion ROV. The SeaLion-3 still maintains a 1,000 foot depth capability and operates with up to 1,500 feet of cable. The full HD pan and tilt front, color camera provides the end user a clear, crisp video for performing underwater searches. This ROV can dramatically reduce search time and the high costs associated with diver-based inspections. With the Sealion-3 your team can locate, inspect, and video tape a target without entering the water. The SeaLion-3 can also narrow the search area so when divers are required, their time is spent on the target, instead of swimming grid patterns. When outfitted with a metal detector (JW Fishers RMD-1), the ROV can search for weapons, unexploded ordnance, pipelines, anchors, buried treasure, or other metallic objects. When an optional sector scanning sonar is added the searching capabilities become endless and allow for searching in "zero viability" conditions.



The ROV has a powerful and sophisticated seven (7) motor, vectored propulsion system with 2x as many thrusters for horizontal movement, and is twice as powerful as its SeaLion-2 predecessor. The (4) four vectored thrusters allow horizontal motion in any direction, and the ability to rotate-in-place. Vertical power is also increased, with (3) three thrusters for diving and lifting. The unique vertical thruster placement also provides the ability to adjust pitch and trim of the ROV. An off-the-shelf Logitech USB controller (supplied) operates the system. A joystick controls the horizontal motors (forward/reverse and turning) - it can hover "in place" and rotate 360 degrees; and the second joystick controls the vertical motors (up/down and lateral movement).



The SeaLion-3 Topside Control Unit (TCU) includes a 15.6" TFT Active Matrix LCD Panel (video monitor) with a 1920  $\times$  1080 Full HD content display for viewing live camera feeds and reviewing media files (video and images). The secondary Control Monitor is a 12.1" TFT Active Matrix LCD touchscreen for controlling the ROV system.

Main features for the video monitor display are:

- viewing live feeds from the two HD camera sources one in the front of the ROV and one mounted at the rear
- the on-screen live feeds`can instantly be swapped between the two cameras
- both feeds can be viewed simultaneously via Picture-in-Picture (PIP).
- a semi-translucent graphical overlay, which can be toggled on/off, shows ROV critical operational data, such as heading, depth, and water temperature.
- a system status bar displays currently active alerts and connection status of system components (rov, gps, gamepad)
- playback of stored videos and images

When using the control monitor the end user has:

- an intuitive user experience using a touch interface, keyboard/mouse not required for normal operation
- a 'dashboard' page for top level telemetry information
- · dark/light color themes
- used in conjunction with a hand controller (gamepad) with user assignable buttons for system actions
- A dashboard screen gives an overview of ROV operation, including power information, ROV heading, and component status.



**Topside Control Box** 



Rear HD adjustable camera

Fishers ROVs are in use around the world by US and foreign military, state and federal agencies, universities, search and rescue groups, and many commercial diving companies. These high-performance underwater camera systems can make public safety search operations less dangerous by assisting in the location of drowning victims and recovery of evidence. They help eliminate the need to dive in difficult or dangerous conditions, whether it be a low visibility environment or a-dive beyond-no-decompression-limits.

At 45 pounds the ROV is highly portable and very "user friendly". With the optional spare parts kit, the ROV is completely field maintainable. JW Fishers SeaLion-3 ROV system represents a major breakthrough in cost/performance for a commercial grade ROV. This high-performance system competes with ROVs more than twice the price.