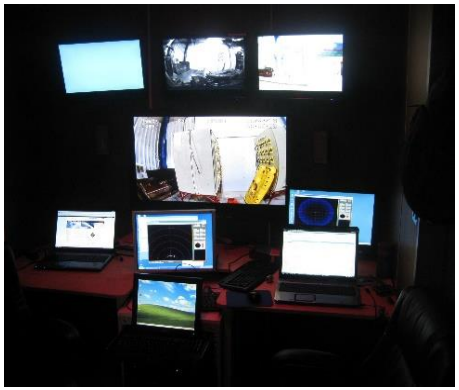
SeaView Systems' SurfROVer

At home in the challenges of the littoral zone as well as subsea, SeaView's unique SurfROVer vehicle is capable of traversing from shore into depths of up to 300 meters. Its powerful battery powered propulsion system makes it ideal for specialized applications such as route surveys and UXO surveys.

SurfROVer has been fitted with sonar, HD video, and acoustic measurement systems. It can track position using a GPS mast for still water conditions or can be operated with an available inertial navigation system that allows it to be controlled via umbilical or with a remote control.

The low-profile design and wide footprint create an extremely stable vehicle for high energy environments and provides an excellent platform for deployment of a cable/pipeline tracker.



GENERAL	
Max Operating Depth	300msw
Overall Dimensions (LxWxH)	LxWxH = 2.6m x 2m x 0.8m
Weight (in air)	680+ kg, depending on configuration
Weight (submerged)	Neg. buoyant: ~600 kg, depending on config
Ground Pressure	0.52 PSI/ 3.5 Kilopascals
Pull Force	500kgf
Battery Life	8-12hrs
Speed (Submerged)	~1.5 m/s
Propulsion	Electro/Hydraulic
Turning Radius	On-the-spot (without tow array)
OPERATING CONDITIONS	
Current Conditions	3 knot current regardless of incident angle
Bottom Type Environments	Range of soil types (sands, muds) up to 80 kPa
Wave Action / Sea States	Up to 2 m plunging waves; Sea State 3
Traverse Capability/ Obstructions	Traverse capability for obstructions 0-20 cm above flat seafloor; barriers, troughs, macro-ripples, shell reefs; etc.
PAYLOAD CAPABILITY	
Payload Allocation	150 kg+
Payload Volume / Hotel Space	~100 liters
Payload Power	AC/DC voltages available
Platform Data	PTZ camera, 2xSD cameras, direction, velocity, roll/pitch/yaw, pressure depth, health status
Positioning	Desired RTK-DGPS; augment with IMU and USBL (tbd)
Payload Data Interface	10/100 Ethernet, RS232, RS485, TTL. Analog I/P. Digital I/O, Quadrature Encoder. Gbit Ethernet (optional)
TOPSIDE INTERFACE	
PC Interface	Windows control/display
Data Interface	Ethernet via tethered modem (e.g., FO-Ethernet modem)

SurfROVer can be controlled via unpowered fiber umbilical or RF (with mast mounted antenna or antenna float system). Position monitoring can be achieved with either on-vehicle GPS (with mast, restricted to lower surf conditions and depths to 6 meters) or available INS capable of accuracies to 0.1 meter.

SeaView Systems, Inc. designs, manufactures and operates remotely operated vehicles, electronics and other custom hardware/software tools, including oceanographic instruments, custom remotely operated vehicles and tooling systems, to meet oceanographic and underwater robotic applications.

For more details or supplemental media, please email SeaView Systems at info@seaviewsystems.com.