SEA MACHINES 300

Autonomous control for commercial vessels

RETROFIT-READY TECHNOLOGY

- Control via autonomy computer or joystick
- Intuitive user interface for remote operator
- Payload control & stream-from-ship data
- Communication, via line-of-sight or over-the-horizon
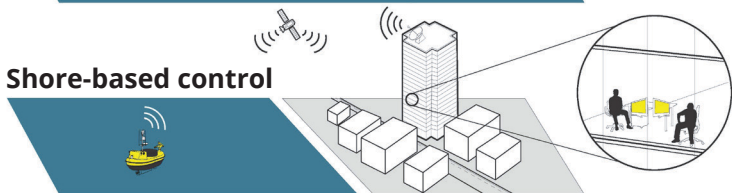
SEA MACHINES 300 CONTROL INTERFACES

Joystick control

Shipboard control

Shore-based control

SEA MACHINES

SEA MACHINES 300

ONBOARD CABINET

Intelligent Control Hub with Flexible Sensor Integration

Primary Hardware	Description
Cabinet Enclosure	IP65 Rated Industrial-Grade, Stainless Steel
Processors	Siemens S7 PLC, Industrial Linux Computer
Dimensions	20 x 20 x 8.80 inches (50.8 x 50.8 x 22.35 cm.)
Weight	65 lbs. (29.48 kg)
User Interface (Local)	Siemens 9 inch Touch Screen HMI
Components	100% Solid State, Ruggedized
Certifications	By most recognized authorities (ABS, DNV)
Temperature Rating	0–60º C

Integrated Machinery	Compatibility
Engines	Electronic or Mechanical
Steering	Electronic or Hydraulic
Transmission	Clutch & Gear Control
Auxiliaries	Per Operator Requirements

Integrated Sensors	Sensor Input
Differential GPS	Position, Heading, COG & SOG
AIS	Ship Traffic Sensor
Radar	ARPA Targets
Image/Video	Multiple Cameras
Depth Sounder	Sounder Feed

Payload Control	Applications
Sonar	Survey
Winches / Loading	Tugs / Aquaculture
Davit / Crane	Equipment Deployment
ROV	Research, Mining, Recovery
Moonpool	Equipment Deployment

REMOTE USER INTERFACE

Rugged Intuitive Interface & Control Devices

User Interfaces	Component Type
Graphical Remote User Control	Ruggedized Laptop with Aux Screens
Direct Vessel Control	Industrial Joystick Controller

Autonomous Modes	Capabilties
Planned Route	Grids, Patrol, Dynamic
Collaborative	Escort / Synchronized Ops
Waypoints	Planned Routing or Dynamic
Safe Routing	ECDIS Integrated
Obstacle Avoidance	Multi Sensor Detection

Communications	Type
Inshore / Nearshore	IP Radio, 4G/LTE
Ship-to-Ship	IP Radio
Long Range (>5nm)	Satellite (L-band, VSAT KU, KA)

Machinery Parameters	Commands & Alarms
Engine Start/Stop	Remote Start / Stop
RPM	Throttle Command
Engine Temp / Engine Oil Pressure	Engine Alarms / Faults
Gear Oil Pressure	Pressure Alarms
Fuel Oil	Tank Levels
Angle Indicator	Degrees PRT/STBD

Interruptions	Safety Devices
Loss of Communications	All stop, Hold Station, Other
Manual Emergency Stop	ALL STOP on all interfaces
Failure Modes	Pre-programmed or customized

Installation support

For new-build or retrofit applications, work with our qualified team and a of installers to create a solution for your mission.

SEA MACHINES

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