Teledyne Marine

Solutions for Offshore Aquaculture

The future of aquaculture relies heavily on technological capabilities that allow operators to collect and analyze data in real-time. Teledyne Marine offers proven technology from adjacent markets such as oceanography and energy to provide integrated systems to gather and present data intuitively in all phases of the project.

Whether you’re selecting an optimal site, in the middle of construction, or in the operations and maintenance phase, Teledyne Marine has a solution for every step of the way.

**IMAGING**
- Perform pre-site selection surveys using hydrographic sensors
- Visualize cage interiors in real time in order to monitor factors such as fish count, behavior, size, health and activity levels, and location using underwater cameras, sonar systems and echosounders
- Accurately detect fish position and movement in order to ensure effective feeding.
- Inspect cages and nets for damage or growth using underwater lights and very high resolution cameras
- Enhance fish production with underwater lighting

**INSTRUMENTS**
- Monitor current profiles to aid in site selection with Acoustic Doppler Current Profilers (ADCPs)
- Predict effects of water movement on underwater structures, and perform flushing and filtration studies with oceanographic sensors
- Keep tabs on salinity and water conditions in real time using Conductivity, Depth and Temperature (CTD) sensors.
- Transmit data to the shore with wireless communication
- Ward off unwanted predators such as aggressive pinnipeds safely and conveniently with a low frequency, broadband pulse from the 2800LLX airgun
- Maintain control of acoustic deterrent sources with a handheld synchronization system

**VEHICLES**
- Survey pre-construction sites using autonomous unmanned vehicles (AUVs), remotely operated surface vehicles, or remotely operated vehicles (ROVs.)
- Perform cage inspections and repairs via remotely operated vehicle
- Reduce the risks and costs of using human divers by using safe, efficient ROVs to monitor stock and remove dead or “mort” fish
- Perform routine integrity inspections of moorings around the cages

**INTERCONNECT**
- Transfer sensor data to the surface or shore via fiber optic/power hybrid cable assemblies
- Power underwater equipment with ruggedized electrical cables, connectors, and cable assemblies
- Provide highly reliable underwater communication integrated solutions for divers
- Manage cables with compact, ruggedized reels designed for use in harsh marine environments
Teledyne Marine is a growing group of surface and subsea technology companies that delivers innovative products and solutions to the offshore, oceanographic, and defense markets.

Contact

Contact us to learn more about imaging, instrumentation, vehicles, and interconnect solutions for offshore fish farms.

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