



LIGHTFISH HYDROGRAPHIC

LOW-COST INTUITIVE PLATFORMS FOR WIDE- AREA HYDROGRAPHIC SURVEY MISSIONS

The Lightfish is the first vehicle in the Seasats family of maritime systems. Its ease of use and persistence make it a dependable tool for low-logistics, rapid-turnaround bathymetric surveys in ports, harbors, canals, and channels.

The Lightfish can be launched and recovered in minutes, acting alone or in constellations to survey areas thoroughly and efficiently. Carrying echosounders from Norbit, EdgeTech, and other industry leaders, the Lightfish can deliver IHO Order 1A survey data with zero people in the water.

PERSISTENT

SOLAR PANELS AND ONBOARD GENERATOR PROVIDE MULTI-WEEK NONSTOP SURVEY ENDURANCE, ENABLING EFFICIENT WIDE-AREA SURVEYS

OCEAN- PROVEN

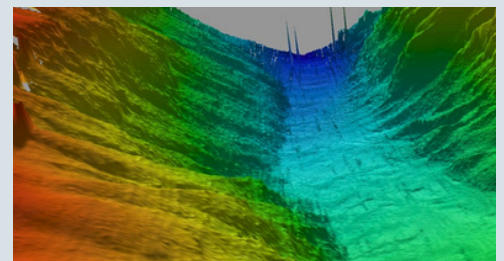
RUGGEDIZED, SELF-RIGHTING PLATFORM CAN SURVEY IN TYPICAL SEA STATES AND LOITER THROUGH STORMS. REDUNDANT COMMS FOR GLOBAL RELIABILITY.

PORTABLE

MAN-PORTABLE PLATFORM CAN BE LAUNCHED DIRECTLY FROM BEACH, RAMP, OR PIER. NO ITAR EXPORT RESTRICTIONS.

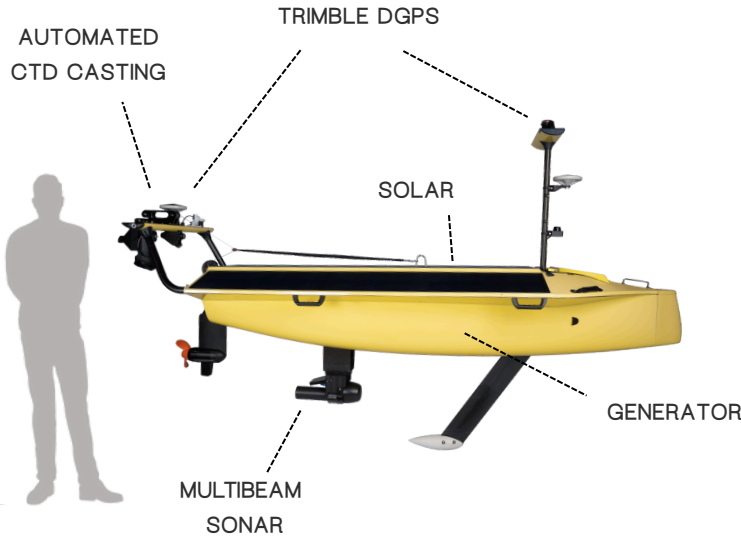
MODULAR

MODULAR OPEN SYSTEM ARCHITECTURE INTEROPERABLE WITH VARIOUS SENSOR AND C2 SYSTEMS



TECHNICAL SPECIFICATIONS

LIGHTFISH HYDROGRAPHIC



LIGHTFISH SPECS	
LENGTH & WIDTH	11.4FT x 3.4 ft (3.5m x 1m)
DRAFT	2.6 ft (0.79m)
WEIGHT	430lb (195kg) fully loaded
HULL	Composite hull with retractable keel
SPEED	4.0 kts sprints; 2.5 kts survey
ENDURANCE RANGE	6 months
SEA STATES	operable to sea state 6+
HYDROGRAPHIC CONFIGURATION PAYLOADS	
STANDARD MULTIBEAM ECHOSOUNDER	Norbit IWBMS w/ accessories
DUAL-ANTENNA GNSS	Trimble RTX
COMMUNICATIONS	Cell, Iridium, Starlink, Manet Radio
PROFILING WINCH	Automated casts up to 500m depth
SOUND VELOCITY PROFILER	Winch-deployed Valeport SVP
NAVIGATION AND SENSING	
STANDARD SENSORS	5X onboard HD camera, GNSS/GPS, IMU, compass, 2D LiDAR, AIS send/receive, tricolor navigation light
COLLISION AVOIDANCE	Automated AIS sense and avoid plus LiDAR object detection
POSITIONING	Dual-antenna GNSS with Trimble RTX
ENERGY	
BATTERIES	4.0 kWh; Lithium Ion
SOLAR PANELS	415 W Nominal Power Output
ONBOARD GENERATOR	100W Output; 11kWh or 28 kWh Capacity
CONTROLS	
SEASATS CONTROL SUITE	Waypoint-Based Missions, RC Control, Direct Heading/Throttle Control

PRACTICAL	●	INTUITIVE CONTROLS COTS BACKBONE SIMPLE MAINTENANCE 3 DAY TRAINING
SCALABLE	●	COST EFFECTIVE MINIMAL OPERATIONAL OVERHEAD CUSTOMIZABLE FOR DIVERSE MISSIONS
TRANSPORTABLE	●	TRANSPORTABLE WITH PICKUP TRUCK & 1-2 PEOPLE. GROUND/AIR/SEA SHIPPABLE
RELIABLE & SAFE	●	AIS BROADCAST, RECEIVE, AND AUTOMATED AVOID; LiDAR OBJECT DETECTION AND AVOIDANCE; NAVIGATION LIGHT; INDEPENDENT BACKUP TRACKER
EASY TO USE	●	BROWSER-BASED AND LAPTOP/TABLET/PHONE COMPATIBLE; SIMPLE GO-HERE COMMANDS, PAYLOAD CONFIGURABILITY, AND ADVANCED MISSION PLANNING