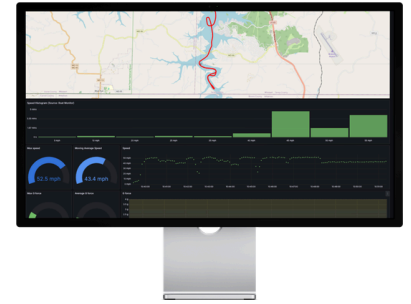


Sensor Marine

Sensor Marine Vessel Lab



Bring the Lab to the Water

Sensor Marine Vessel Lab is the engineering analytics service that turns your sea trials into live, cloud-delivered insight – utilizing the award winning Sensor Marine Boat Monitor platform.

Run it. Measure it. Refine it.

Critical data from every test run appears on a dashboard designed for R&D teams:

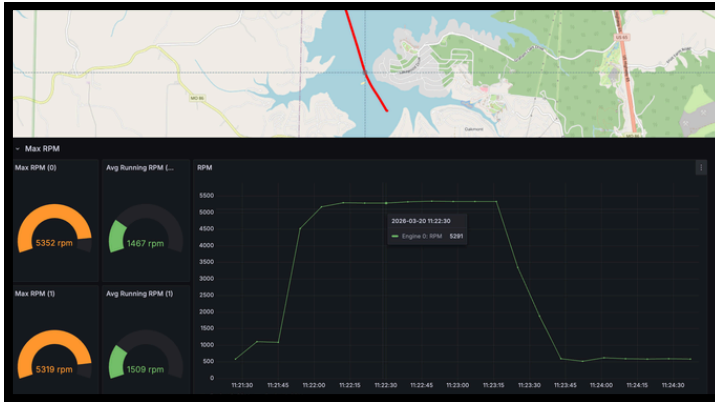
- **Speed, position, and heading** – captured by the Boat Monitor's integrated GPS, independent of any other electronics on board. Works on bare prototypes with nothing else wired in.
- **Impact G-loads** – logged continuously by the Boat Monitor's built-in 3-axis accelerometer, geo-tagged to the exact wave or maneuver that caused them. No extra IMU to install.
- **Engine RPM, trim, and boost pressure** – pulled off the NMEA 2000 bus in real time
- **Fuel flow, engine hours, and temperatures** – see efficiency curves build as the boat runs
- **Propeller, trim, and setup comparisons** – run back-to-back trials with data captured for comparison before the boat is back on the trailer

See data visually, adjust time spans to zoom in on key moments, and export raw data for further analysis.

Your test captain runs the boat.

Your engineers watch the data from the office — or from anywhere.





Vessel Lab - Web Dashboards

CAPTURED EVERY FIVE SECONDS...

Source	Data Captured
Sensor Marine (BM700)	GPS position, speed, heading, 3-axis G-force / impact, battery voltages, bilge pump activity
PGN 127488 (Engine Rapid)	RPM, boost pressure, engine trim/tilt
PGN 127489 (Engine Dynamic)	Fuel flow, engine hours, coolant temp, oil pressure, oil temp, alternator voltage
PGN 127505 (Fluid Level)	Fuel and water tank levels
PGN 129026 (COG & SOG)	Course and speed over ground from N2K GPS (redundant to native GPS)

Multi-instance support for multi-engine boats. Export data for additional analysis. Additional PGNs (trim tabs, rudder angle, wind, depth, etc.) available – pushed remotely, no site visit required.

Engine Parameters, Dynamic PGN: 127489											
Time	alternator_voltage	deviceID	engine_coolant_temp	engine_discrete_state	engine_discrete_state	engine_instance	engine_oil_pressure	engine_oil_temp_cik	engine_temp_cik	fuel_pressure_kPa	fuel_flow
2020-04-16 11:23:44	1405	0012460029c0e97	101	0	0	1	5755	3801	33015	0	0
2020-04-16 11:23:44	1418	0012460029c0e97	1010	0	0	0	5810	3821	33115	0	0
2020-04-16 11:23:35	1405	0012460029c0e97	1138	0	0	1	5864	3801	33015	0	0
2020-04-16 11:23:35	1441	0012460029c0e97	1088	0	0	0	5788	3811	33115	0	0
2020-04-16 11:23:26	1400	0012460029c0e97	1244	0	0	1	5863	3781	33115	0	0
2020-04-16 11:23:26	1437	0012460029c0e97	1189	0	0	0	5897	3801	33015	0	0

Engine Parameters, Rapid Update PGN: 127488						
Time	deviceID	engine_boost_pressure_kPa	engine_instance	engine_speed_kRpm	engine_trim_pct	instance
2020-04-16 10:22:10	0012460029c0e97	443	0	2332	1	0
2020-04-16 10:22:10	0012460029c0e97	461	1	2364	0	1
2020-04-16 10:22:19	0012460029c0e97	435	0	2496	1	0
2020-04-16 10:22:19	0012460029c0e97	460	1	2384	0	1
2020-04-16 10:22:29	0012460029c0e97	412	0	2380	1	0
2020-04-16 10:22:29	0012460029c0e97	438	1	2484	0	1

Raw Data Export

Vessel Lab Pricing
\$1,495 per system per year
+ hardware

Vessel Lab Hardware

Boat Monitor
BM700, \$399 MRP

Expansion Hub
EH700, \$399 MRP

