

# PRONOVA SYSTEMS Inc.

## Advanced Environmental Solutions

Increase your fuel savings today. 8% to 20% reduction in fuel consumption is typical

### THE OPTIFUEL 1223 SOLUTION

A real-time control system containing advanced algorithms that continuously calculates the Optimal Speed corresponding to the Minimum Fuel Consumption of the ship propulsion system.

#### FUEL SAVINGS BY:

- Optimal Speed Calculation;
- Bunkering management;
- Trim Optimization;
- Eliminates Human Factor in fuel losses;
- Eliminates ship-specific fuel losses;
- Load balancing across Engines and Propellers;
- Tide Synchronization;
- Set the system to achieve minimum Fuel Oil Consumption and protect environment.

Applicable for any type of ship propulsion FPP and CPP propeller, Voith Schneider, Electrical Pods, etc.

### PROVEN MARINE ENVIRONMENTAL SOLUTIONS

#### EASE OF INSTALLATION & MAINTENANCE

- The system is designed to work online or offline.
- Installation is done without interrupting the ship operation and does not require changes to the existing shipboard systems.
- Installation can be done while the ship is in operation.
- Standard interconnection to ships' diesel propulsion plant, GPS, voyage management system, etc.
- The OPTIFUEL 1223 System is very low maintenance.

Routine maintenance is easy and low cost.

### SIMPLIFY BALLAST REGULATION REPORTING

#### BALLAST WATER MANAGEMENT SYSTEM

- Ballast water exchange management;
- Ballast water control and monitoring;
- Ballast water internet reporting;
- Ballast water treatment monitoring and reporting.

Features to assure ballast reporting compliance.

### SIMPLIFY EMISSIONS REGULATION REPORTING

#### CO2 MONITORING, REPORTING, VERIFICATION BY:

- Bunkering Delivery Notes;
- Bunker Fuel Tanks Monitoring;
- Mass Flow Meters;
- Direct Emissions measurements;
- Additionally: NOX, SOX monitoring and reporting as per Marpol Annex VI.

Features to lower the cost of emissions regulatory compliance reporting.

### GAIN FULL VISIBILITY AND CONTROL OF THE VESSEL'S LARGEST COST: FUEL.

#### BUSINESS CASE EXAMPLE:

##### A CONTAINER SHIP ....

- Fuel consumption: 10,000 MTs of fuel per year;
- Cost: \$500 /MT of fuel;
- Fuel Savings: 1,000 MTs of fuel saved per year (10% savings);
- Cost savings: \$500,000 in annual savings.

System payback typical in 9-15 months.

### EASY TO OPERATE

#### OPERATION FUNCTIONS:

- Internet access to ship data;
- Daily automatic reporting;
- Operator access from the office (control at any time, from anywhere);
- Reports for the last hour, day, month (as required by the ship operation);
- Troubleshooting by Internet;
- Torque and Power direct measurement;
- Online Main Engine Performance Monitoring.

Functions that lower operational costs and increase ship profitability.



# PRONOVA SYSTEMS Inc.

Increase your fuel savings today. 8% to 20% reduction in fuel consumption is typical

## OPERATIONAL FEATURES

DATA (ONBOARD)		
SHIP FUEL SAVINGS	SHIP GHG REDUCTION	OPTIONAL FUNCTIONS
<ul style="list-style-type: none"> <li>▶ Optimal Speed Calculation &amp; Optimization;</li> <li>▶ Optimal Trim Calculation &amp; Optimization;</li> <li>▶ Fuel Bunkering Management;</li> <li>▶ Eliminates human error in fuel losses;</li> <li>▶ Eliminates ship-specific fuel losses;</li> <li>▶ Load balancing between main engines, propellers &amp; diesel-generators;</li> <li>▶ Tide Synchronization</li> </ul>	<ul style="list-style-type: none"> <li>▶ Online Measurements of GHG Components: CO<sub>2</sub>, SO<sub>x</sub>, NO<sub>x</sub>;</li> <li>▶ EEOI Calculation;</li> <li>▶ Scrubber Interface</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ballast Water Cleaning Control, Monitoring, Reporting &amp; Verification;</li> <li>▶ Used Water Treatment Control &amp; Monitoring</li> </ul>

## Pronova Systems OPTIFUEL 1223



## Contact us today:

AlphaCEMS is the global distributor for the Pronova Optifuel 1223 System.

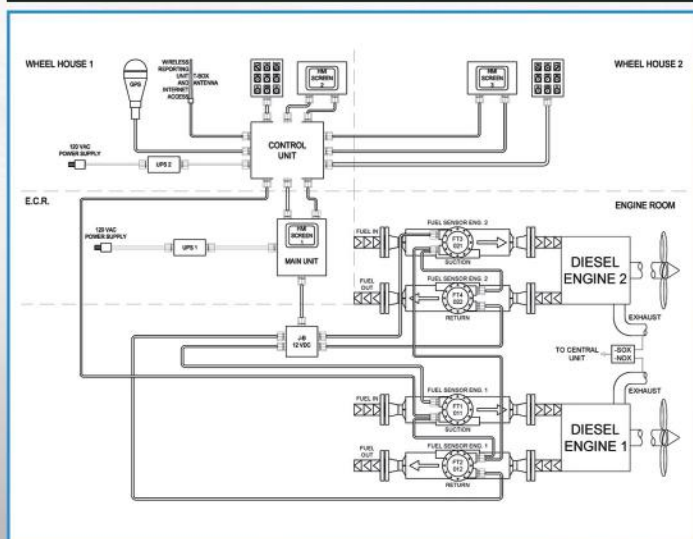
# PRONOVA SYSTEMS Inc.

AlphaCEMS Ltd.  
Pronova Systems Inc.  
3380 Francis Hughes Laval, Quebec  
H7L 5A7 Canada

Tel: 1-514-519-2191  
www.pronovasystems.com



Tel: 1-902-316-1881  
www.alphacems.com  
info@alphacems.com



Unauthorized distribution, copying or disclosure is strictly prohibited. AlphaCEMS makes no representation or warranty, express or implied, as to the accuracy or completeness of the information contained in this material. AlphaCEMS shall have no liability, direct or indirect, to any recipient or any other person resulting from the use of information contained in this marketing material.