

# FUSION™

## **Marine Vessel Fuel Accountability & Management System**

*Giving You The Power  
To Optimize Workboat  
Fuel Efficiency*

Product Introduction  
& Literature CD



[www.ftimeters.com](http://www.ftimeters.com)

## FUSION™

# Marine Vessel Fuel Accountability & Management System

### *Improved business results from workboat operations*

Today, with fuel prices at record levels, every vessel operator or charterer needs to understand and manage the fuel consumption and fuel efficiency of their entire fleet.

To meet this need, Flow Technology, Inc. introduces FUSION™, an advanced Marine Fuel Accountability & Management System specifically designed for diesel-powered marine vessels.

### *Know where every drop of fuel is used*

FUSION™ accurately measures, records, reports and displays the fuel consumption and fuel efficiency of marine vessel diesel engines. The system allows the crew to select the optimum throttle position based on the real-time display of both fuel usage and engine efficiency for any sea or weather condition.

The FUSION™ system is designed for use on marine vessels such as oil & gas offshore support workboats, ferries, fishing trawlers, and river tugs with up to two propulsion and two generator engines. The standard fuel is either #2 diesel or Marine Gas Oil, however, the flow meters can be calibrated for other fuels on request.

### *Manage your fleet for greater efficiency and lower costs*

A comprehensive, shore-based software package is available for FUSION™ that allows an operator to truly measure the effectiveness of fuel-saving strategies through precise time-tagged trending displays. The data recorded can also be used for scheduling engine maintenance, recording air emissions statistics, and creating ISO 14000 records.



# Learn more about the FUSION™ System

*Executive Overview*

*Data Analysis Demo*

*Specification Sheets*

*Ordering Wizard*

*Installation  
Documentation*

*Presentations*

*About Flow  
Technology*



## ***FUSION™ delivers improved business results for workboat operations***

- Designed for diesel-powered marine vessels
- Fully integrated system
- Temperature-compensated fuel flow meters
- Powerful shore-based software

Fully integrated system with each component specifically designed to work in the harsh environment of a workboat.

Employs temperature-compensated fuel flow meters providing highly accurate measurements corrected for variations in fuel viscosity, and a “fail-open” geometry ensuring vessel safety is not compromised.

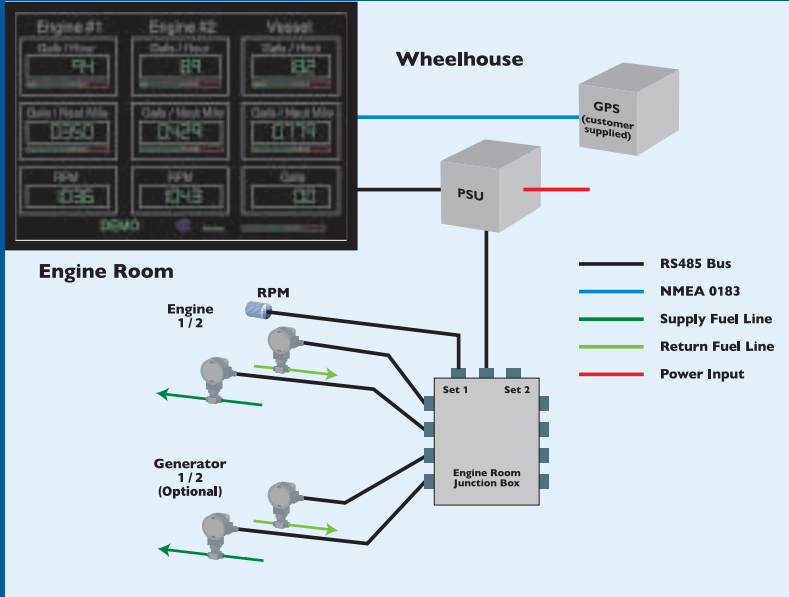
Includes a wheelhouse marine data acquisition unit (DAU) with an integrated sunlight readable and dimmable color liquid crystal display for both daytime and nighttime operation.

Logs fuel consumption and efficiency data for trending with daily, weekly, monthly and yearly displays via FUSION™ Manager software.

Uses hard armored cable in the engine room, and from the engine room to the wheelhouse, for highly robust and enduring installation.

Designed, manufactured and supported by Flow Technology, a recognized leader in mission-critical flow measurement applications such as flight test, space exploration, auto testing and racing.



**System Overview**

- Designed to measure the net fuel burned in two main propulsion engines, with an option to add two generators
- Engine room equipment comprises:
  - Stainless steel fuel supply and fuel return flow meters tolerant to pulsations associated with reciprocating engines
  - RPM sensors
  - NEMA 4X junction box
- Fail-open geometry flow meters for uncompromised vessel safety
- Wheelhouse equipment comprises:
  - 10.4" DAU with integrated color LCD display
  - Optional sunlight readable (1500 nit) touch-screen available
- Armored hard cable for system interconnection
- System accepts a NMEA 0183 input from an existing GPS serial data output
- English or metric data display selectable via system configuration
- Excellent speed of response
- Flow meter repeatability of  $\pm 0.05\%$
- Flow meter accuracy better than  $\pm 0.2\%$  over operating temperature range \*
- Operating temperature range of  $-40^{\circ}\text{F}$  to  $185^{\circ}\text{F}$

\* at typical operating conditions