



Smart ODME Pump - Measuring Cell

The Oil Discharge Monitoring Equipment (Smart ODME) has been designed to provide means of monitoring, recording and controlling the ballast discharge in accordance with the requirements of MEPC 108(49) for crude oil/product and chemical tankers including ICE class vessels.

Discharge limits are set at 30 Litres per nautical mile and total discharge expressed as a proportion of the previous cargo for dirty ballast.

Applications	
•	Ballast Water Discharge
•	Regulatory Compliance
•	FPSO/FSO/FSU Ballast Water Discharge



Smart ODME Computer Module

The system is modular in construction and does not require the usual pump/motor bulkhead penetration as used on older systems. The Smart ODME includes all components required to meet MEPC 108(49) and is designed for ease of operation, installation and maintenance.

The Smart ODME incorporates a 'simulation mode' to aid system demonstration to PSC surveyors.

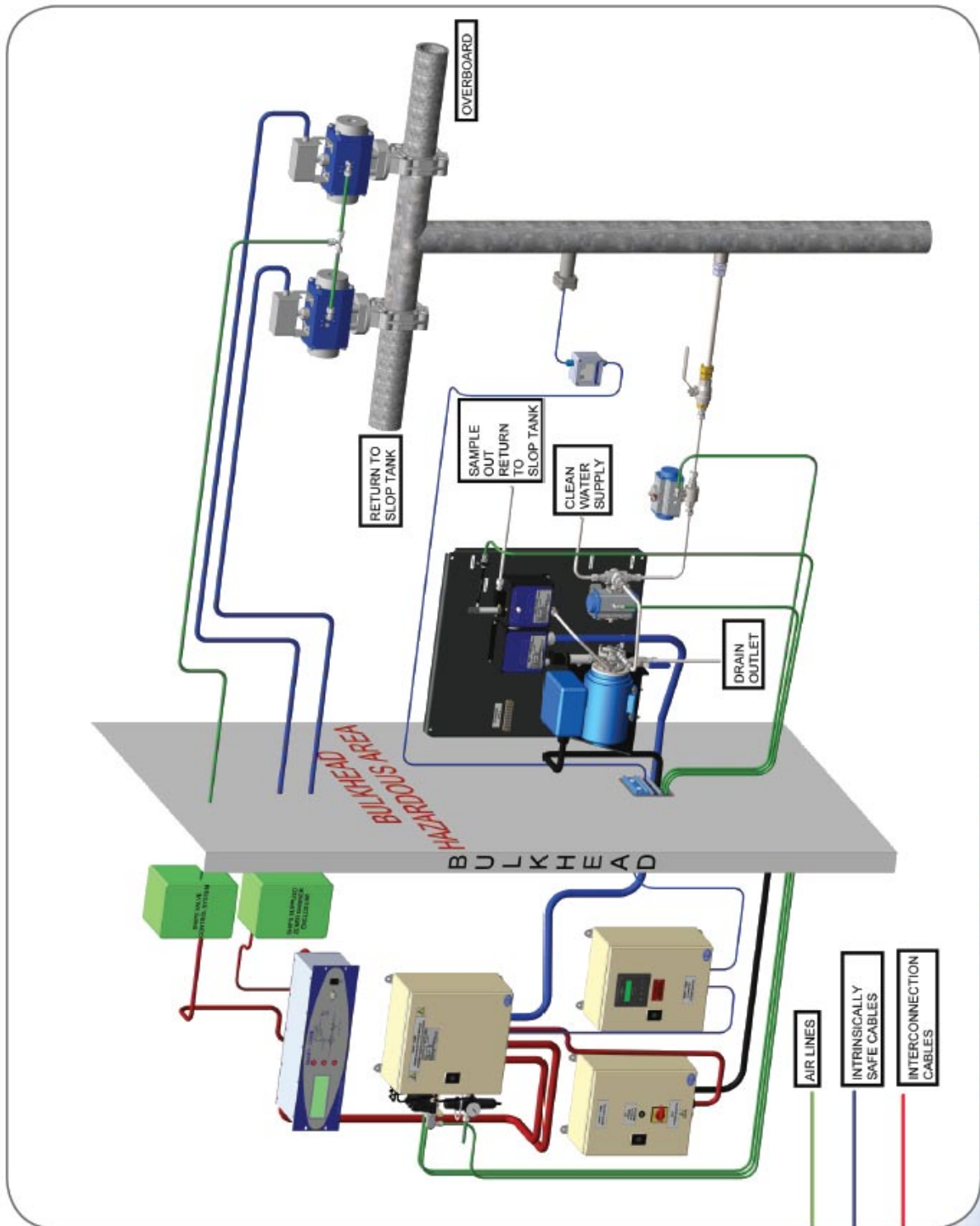
For more detailed technical specification, please see over:



SPECIFICATION

Measurement	
Oil types:	As Per MEPC 108(49) Requirements
Clean water calibration:	Automatic
Oil measurement range:	0 - 1000 ppm all types
Resolution:	1 ppm
Accuracy oil + solids:	As Per MEPC 108(49) Requirements
User Interface	
Display:	4 line x 20 alphanumeric back lit LCD display
Control + Setup:	3 button keypad incorporating real time system display
Input / Output	
Output:	USB and RS232
Log Input:	200 Contact Closures per nautical mile
GPS:	NMEA 0183
Data Storage and Retrieval	
Calibration data:	Stored onboard microcontroller
Storage data:	Stored onboard mounted memory media
Data retrieval:	via LCD display or download to PC with Hyperterminal
Environmental & Sample	
Ambient temperature:	-10 to +50°C
Sample / clean water flow rate:	0.5 - 4.0 litres / min
Sample / Inlet pressure:	1 bar
System and Supply	
Supply voltage:	115 / 230V ac, 50 - 60Hz
Zenner Barrier/Computer Module:	115 / 230V ac, 50 - 60Hz (Switchable)
Motor:	380-440V ac, 50-60Hz, 3 phase, 250W
Supply voltage Consumption:	< 50 VA Single Phase
Approvals:	IMO MEPC 108 (49) and GL + USCG
Mounting options:	3U 19" Rack or Cabinet (Computer Module)

SMART ODME LAYOUT



RIVERTRACE ENGINEERING

MARINE PRODUCTS



Smart Cell 15ppm OCM MEPC 107 (49)

Rivertrace Engineering is a market leader with over 30 years experience of Oil in Water Monitoring. RTE manufacture oil content monitors for the marine, offshore and industrial markets with up to date engineering solutions incorporating PFM technology. Our client list includes most of the worlds' oily water separator OEMs, shipyards and vessel operators. We have IMO type approvals for both Bilge and Ballast monitors. Our global network of agents ensures local service and spare parts at key locations.



SmartSafe - Bilge Overboard Security System



Smart 50M – Oil in Water Monitor



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Rivertrace Engineering Limited
 Unit P, Kingsfield Business Centre Philanthropic Road Redhill Surrey RH1 4DP England
 Tel: +44 (0)1737 775500 Fax: +44 (0)1737 775501 Email: info@rivertrace.com www.rivertrace.com

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