

Smart 50M Oil in Water Monitor



Smart 50M – Oil in Water Monitor

Applications

- Hydrocarbon Leak Detection
- Lube Oil Cooler Monitoring
- Boiler Feed Protection
- Heat Exchanger Leak Detection
- Produced Water Reuse - RO Feed Water, Steam Generator Feed Water
- Industrial Wastewater/Groundwater discharge

A versatile and sophisticated monitor to suit multiple applications in marine and industrial environments. The Smart 50M uses a nephelometry based detection technique and uses sophisticated algorithms to detect Oil and suspended solids in the sample.

The design of the measuring cell allows the monitoring of high temperature and high pressure samples across multiple ranges of Oil Concentration. Auto-Clean and Auto-Zeroing functionality ensures the maintenance is minimal and that the measuring cell is kept free from fouling.

The Smart 50M can provide the Oil Concentration value to a DCS or PLC using a 4-20mA output and additional process variables can also be provided using the Modbus digital communications protocol (over RS485).

As standard the following data is available:

- Oil Concentration
- Sample Pressure
- Sample Temperature
- Solids Content
- Fault Status
- Alarm and Run states

Conductivity, pH and Dissolved Oxygen can also be monitored by incorporating the Auxiliary Inputs Assembly. We are also able to build this as an "Exd" type system in a protective enclosure for Hazardous Environments.



Smart 50M Oil in Water Monitor

Specification

| | | |
|---------------------------|---|--|
| Ranges: | Low range Medium range High range | 0.1 - 10 ppm 1 - 200 ppm 1 - 5000 ppm |
| Accuracy: | Low range Medium range High range | +/- 0.15 ppm +/- 5 ppm to 50 ppm, 10 ppm thereafter +/- 200 ppm |
| Alarm 1 Operating Point: | Low range Medium range High range | 0.1 - 10 ppm 1 - 200 ppm 1 - 5000 ppm |
| Alarm 2 Operating Point: | Low range Medium range High range | 0.1 - 10 ppm 1 - 200 ppm 1 - 5000 ppm |
| Alarm 1 Operating Delay: | 1 - 15 seconds | |
| Alarm 2 Operating Delay: | 1 - 600 seconds | |
| Alarm contact rating: | 8 AMP @230VAC | |
| Output signal: | 4-20 mA - Modbus | |
| Ambient temperature: | 1-60 °C / 34-140 F | |
| Humidity: | Max 98% non condensing | |
| Sample temperature: | 1 - 95 °C / 34-203 F | |
| Sample Flow: | 0.3 - 3 Ltrs per min / 0.079 - 0.79 Gal per min | |
| Sample Pressure: | 0.1 - 10 Bar / 1.45 - 145 Psi | |
| Clean Water requirements: | 0.3 - 3L per min / 0.079 - 0.79 Gal per min for 'zeroing' | |
| Weight: | 15kg / 33.07 lb | |
| Size: | 500 x 360 x 150mm / 19.7" x 14.2" x 5.9" | |
| Supply voltage: | 110/230V ac (Switchable) | |
| Power consumption: | 15 VA | |
| Degree of Protection: | IP56 | |
| Approvals (pending): | Tested to EN61010 EN61326 (CE), c UL us. | |

Specifications and system descriptions accurate at time of printing. These are subject to change.

