

WaterWatch2920 – Oil on Water Monitor



Partech Instruments is a specialist company providing analysers and instruments for monitoring and control in; wastewater, raw water, industrial effluent and surface water applications.

Whatever the application and whatever the location, Partech will supply an effective and efficient service and a support package tailored to suit the customer

Contamination of water courses by visible oil is a problem that requires fast, reliable detection to prevent damage to either the local environment or a treatment process. If oil is allowed to enter a river then wildlife can be harmed, if the oil then enters a drinking water plant damage can be caused to the processing system or more critically the quality of the drinking water can be affected.

Early warning of a problem allows remedial action to be taken either by automatically shutting down a process or control valve or by manual intervention. The monitor can also be connected to pollution prevention equipment such as oil dispersants or oil adsorbing mops and booms.

The floating sensor has a dual hull designed to channel any oil passing through the centre of the float so that it is presented to the detector. The infrared sensor emits light that is reflected from the surface, any oil that is present increases the amount of light reflected and this is then converted into the desired output signals.

The float is supplied with two fixing cables and a weight to keep it stationary and correctly orientated. In addition a range of mounting accessories can be offered to suit the individual requirements of each application. We are happy to offer advice on the best mounting system to your application.

Applications exist in power generation, manufacturing plants, oil and water separators and in roads and car park run off collection.



The WaterWatch2910 system uses a floating sensor to detect visible oil on water. The float can be deployed in any application where the surface of the water is relatively calm. The monitor will react rapidly to both partial and complete films of oil on the surface of the water.

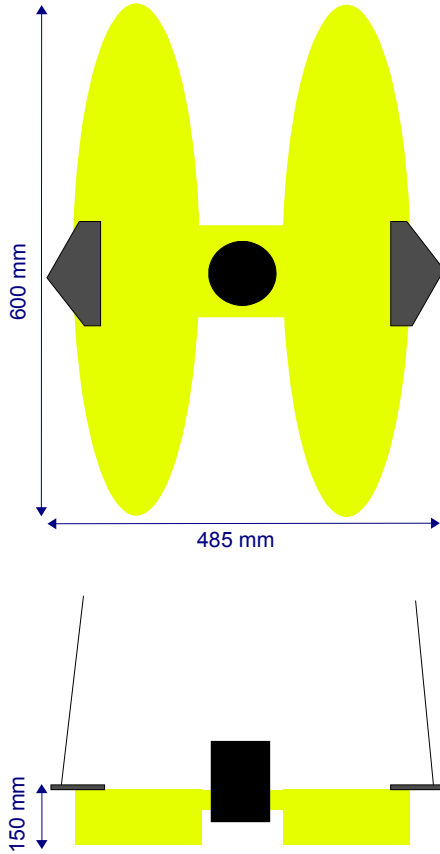
The measuring system is extremely stable and needs only occasional validation to ensure reliable operation.

In addition to the alarm output the monitor provides an analogue signal proportional to the probability of oil being present. The higher the probability the more widespread the pollution. This enables tracking of the incident over time as well as providing an immediate callout alarm.

Associated Products

- WaterWatch2910 – Flow Cell Version
- WaterWatch2950 – Organic Pollution Monitor

WaterWatch2920 – Oil on Water Monitor



Physical - Monitor

Weight	2.2 kg
Dimensions (h x w x d)	222 x 214 x 92 mm
Enclosure Rating	IP65
Enclosure Material	ABS
Cable Entries	5 x M13 and 1 x M20
Cable Size	Max Conductor Cross Section 4 mm ²

Physical - Float

Weight	2.2 kg
Dimensions (h x w x l)	150 x 485 x 600 mm
Enclosure Rating	IP68
Enclosure Material	Fibre Glass Coated Float with Black Acetal Transmitter Housing

Environmental Data

Operating Temperature	0 to 60°C
Storage Temperature	-20 to 60°C
Location	Indoor or Outdoor

Power Supply

Voltage	115/230 VAC +10/-15% Field Selectable, 12/24 DC option
Power Consumption	11W

Analog Output

Number	1
Type	4-20 mA Isolated
Max Load Resistance	750 ohms

Relay Outputs and Set Points

No	2
Contacts	SPCO
Rating	5A @ 230 VAC, 5A@125 VDC
Type	High, Low or Fault
Adjustment	0-100% Sensor Range

Measurement Details

Response Time	0.2 to 120 seconds
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Serial Communications

RS232	Yes
Modbus	Pending
Profibus	Pending

User Interface

Display	4 Digit Red LED display for process variable 2 Line LCD display for Configuration and Operation via 5 Button Membrane Keypad
Setup	% Probability of Oil Presence

Software

Remote Programming	No
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Mounting

Monitor	Surface
Transducer	Float Mounted with 2 Stainless Steel restraining cables

Approvals

EMC Standard	EN50082-1 (1994) Residential, Commercial, Light Industry
EMC Directive	89/336/EEC
Low Voltage Directive	73/23/EEC

Part Numbers

201890	WaterWatch2920 – Monitor Visible Oil on Water
201900	WaterWatch2920 – Monitor Visible Oil on Water with datalogging
201910	WaterWatch2920 – Sensor Visible Oil on Water



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The company reserves the right to alter the specification without prior notice. E&OE