

OilGuard 2 W

On-line oil trace monitor for water treatment



Applications

- Monitoring oil traces in raw water
- Monitoring oil traces in process and waste water
- Monitoring of polyaromatic HC

Advantages

- Proven UV fluorescence measuring principle
- Re-calibration with secondary standard (fully automatic at model A)
- Measurement also possible in turbid water
- Convenient operation via colour touchscreen display
- Display of values and / or graphs visualizing the measurements of the past month
- Correlates with all internationally acknowledged reference methods

Industries

- Drinking water treatment
- Waste water treatment
- Industrial waste water

Innovations with tangible benefits



Non-contact free-fall measurement

The OilGuard 2 W detects oil traces in a free-falling stream that eliminates contact between the water and the optics.

- There are no reading falsifications resulting from window soiling
- Low and high values can be measured precisely
- The measurement of the complete sample stream provides a representative result
- There is an extremely low need for maintenance



Extremely high resolution

The ingenious instrument design of the OilGuard 2 W in combination with the high quality of its optical components minimizes the effect of interferences. Thus, even the smallest traces of oil can be detected.

- A stable measurement below $1\mu\text{g/l}$ (ppb EPA-PAH) is possible
- A stable zero point guarantees the long-term stability of the measurement



Adjusting the instrument to customer specific oils

The instrument can be adapted to various types of oil to meet customer requirements. Checking the instrument is easy with corresponding solutions. The instrument's factory setting is calibrated with 16 EPA-PAH standard. The OilGuard 2W can be recalibrated by the customer with a secondary standard (solid reference).

- Exact re-calibration without use of chemicals in the field
- Reliable conversion factor to standard mineral oil (ISO 9377-2)
- Can be used as watchdog for oil measurement



Integrated control unit

The OilGuard 2 W has a touchscreen with colour display.

- Values, graphs, states or alarms can be displayed, respectively
- An internal data logger allows the visualisation of the measured data covering the past 32 days

Main technical details

Measuring principle:	UV fluorescence
Light source:	LED 280 nm
Measuring span:	0 ... 800 $\mu\text{g/l}$ (ppb) 16 EPA-PAH 0 ... 100 ppm (mineral oil according to ISO 9377-2) 4 ppb EPA-PAH ($\pm 10\%$ error) = 1 ppm oil (ISO 9377-2)*
Measuring ranges:	8, freely programmable
Resolution:	0.01 $\mu\text{g/l}$ (ppb)**
Protection:	IP54
Sample flow:	min. 3 l/min

* ISO oil setting as watchdog

** Calibration with 16 EPA-PAH standard

Full details and technical data:



OilGuard 2 W

Technical data

Technical data

Measuring principle:	UV fluorescence
Light source:	LED 280 nm
Measuring span:	0 ... 800 µg/l (ppb) 16 EPA-PAH 0 ... 100 ppm (mineral oil according to ISO 9377-2) 4 ppb EPA-PAH (±10% error) = 1 ppm oil (ISO 9377-2)*
Lowest measuring range:	3 µg/l (ppb)**
Measuring ranges:	8, freely programmable
Resolution:	0.01µg/l (ppb)**
Detection limit:	<0.1µg/l (ppb)**
Sample temperature:	0 ... +50 °C
Ambient temperature:	-10 ... +50 °C
Ambient humidity:	0 ... 100% rel.
Protection:	IP54
Power supply:	18 ... 30 VDC, optional: 100 ... 240 VAC, 47 ... 63 Hz
Power consumption max:	max. 8 W

Installation

Sample inlet / drain:	Tube connection inside Ø 12/25 mm
Sample flow:	min. 3 l/min
Sample inlet / drain:	SS 316 L/ PVC

- * ISO oil setting as watchdog
- ** Calibration with 16 EPA-PAH standard

Control unit

Display:	1/4 VGA, 3.5»
Operation:	Touchscreen
Output:	2 × 0/4 ... 20 mA, galv. isolated 2 × relay 250 VAC, 4A
Input:	1 × for option. flowmeter for OilGuard 2 W A 2 × 0/4 ... 20 mA
Digital interfaces:	Ethernet, Modbus TCP, SD card
Optional:	Profibus DP, Modbus RTU, Profinet IO

