



MS1220-S | OIL IN WATER ANALYSER | 1 - 200 PPM

The MS1220-S is a **high concentration oil in water analyser** designed to monitor water in industrial and petrochemical processes. The presence of pollutants such as BTEX, trichloroethylene (TCE), tetrachloroethylene (PCE or Perc), vinyl chloride, 1,2-dichloroethane, 1,1,1-Trichloroethane, 1,1-dichloroethylene, styrene can lead to heavy fines and process contamination. The instrument works by sensing gases or volatiles to provide a non-contact measurement system with very low maintenance requirements.

APPLICATIONS

- Refineries and petrochemical industries
- Monitoring of industrial outflows
- Management of drain and stormwater systems
- Detection of fuel pollution in surface water
- Industrial wastewater monitoring
- Oil detection in cooling water

FEATURES AND BENEFITS

- Wide measuring range up to 200 ppm
- Contactless measurement
- Not affected by turbidity
- Detects VOCs, BTEX, fuel oils and PAH
- Relay control of users' pumps and valves
- Powerful diagnostics
- Versatile communication protocols

- ✓ Continuous monitoring
- ✓ Long sensor lifetime: 5+ years*
- ✓ Low operating and maintenance costs
- ✓ Ideal for the Oil&Gas sector
- ✓ Low maintenance, no sensor cleaning
- ✓ Insensitive to turbidity
- ✓ Field proven technology



TECHNICAL SPECIFICATION

PARAMETER	OPERATIONAL REQUIREMENTS		NOTES
	MINIMUM	MAXIMUM	
DETECTION RANGE	1 ppm	200 ppm	Total VOCs
4-20 mA RANGE (DEFAULT)	0 ppm	200 ppm	Configurable on commissioning
REPEATABILITY	-5%	+5%	+/-15% from 20 to 100 ppm, measured with a 50 ppm toluene solution at standard temperature and pressure; accuracy can be further improved at concentration of interest, using bespoke calibration available on request.
ACCURACY	-15%	+15%	
MEASUREMENT FREQUENCY	Continuous		
AMBIENT TEMPERATURE	0 °C	50 °C	Climate control might be needed depending on process and ambient conditions
WATER TEMPERATURE	1 °C	50 °C	
ANALOGUE INPUT	4 mA	20 mA	Scalable to range required, max load 750 Ω , loop powered or instrument powered
ANALOGUE OUTPUT	4 mA	20 mA	
ANALOGUE OUTPUT ISOLATION	5 kVAC, 400 VDC		
RELAY CURRENT		5 A	Max. 250 VAC or 30 VDC; 3x: Alarm 1, 2 and Fault Relays with NO and NC contacts
INTERFACE	Touchscreen		With advanced reporting capabilities
COMMUNICATION PROTOCOLS	Modbus (Optional)		Profibus / HART / Foundation Fieldbus on request
DATA STORAGE	μ SD Card / Windows PC		
INSTRUMENT CASE	IP65		Powder coated stainless steel
SYSTEM WEIGHT	30 kg		
SAMPLING TANK	316 Stainless Steel		
FLOW LIMIT SWITCH			Option available on request
WATER FLOW RATE	2 l/min		
SYSTEM DIMENSIONS	450 x 200 x 680 mm		
SUPPLY VOLTAGE	90 VAC	240 VAC	50 Hz or 60 Hz
POWER CONSUMPTION		25 W	

*Under standard operating conditions

CONSUMABLES

6 Months: Filters and restrictors

SERVICE

Service is necessary every 6 months to keep the instrument operating in optimal conditions. Air Pump replaced every 18-36 months as required. Service should be carried out by a trained technician who has undergone the standard Multisensor Systems training course.



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Multisensor Systems Limited reserves the right to revise any specifications and data contained within this document without notice.

Multisensor Systems is a developer and supplier of Water and Gas Analysers specialising in oil in water and hydrocarbon analysers, oil in water detectors, VOC monitors and THM analysers based in the United Kingdom.

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CHANGELOG

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