



MS1800 | VOC IN GAS ANALYSER

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The **MS1800 is a VOC and Hydrocarbon Gas Concentration Analyser**. It is designed to monitor VOC gases in industrial processes and applications as well as in environmental monitoring applications.

The instrument senses gases or volatiles providing a measurement system with very low maintenance requirements

APPLICATIONS

- Monitoring of Total VOC
- Process VOC Monitoring
- Environmental Monitoring
- Detection of VOCs in wastewater systems
- Odor Control
- Sewage Network Monitoring
- Natural Gas Extraction

FEATURES AND BENEFITS

- Continuous measurement
- Inbuilt Humidity compensation
- Contactless measurement
- Compact and light
- Integrated datalogging

- ✓ Continuous monitoring
- ✓ 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	1000 ppm	
OUTPUT RANGE (DEFAULT)	0 ppm	1000 ppm	Configurable on commissioning
REPEATABILITY	-5%	+5%	See Note 1
ACCURACY	-15%	+15%	See Note 1
MEASUREMENT FREQUENCY	Continuous		15, 20, 30, 60 minutes modes available on request
AMBIENT TEMPERATURE	0 °C	40 °C	See Note 2
ANALOGUE OUTPUT	4 mA	20 mA	Scalable to range required, max load 900 Ω
ANALOGUE OUTPUT ISOLATION	400 V DC		
RELAY VOLTAGE		50 V	Alarm and Fault Relays with NO contacts
RELAY CURRENT		5 A	
SERVICE INTERFACE	USB-A to PC		Using Multisensor Software provided
DATA STORAGE	µSD Card		6 months
INSTRUMENT CASE	IP65		
INSTRUMENT WEIGHT	5 kg		
INSTRUMENT DIMENSIONS	300 x 200 x 132 mm		
SUPPLY VOLTAGE			50 Hz or 60 Hz
AC VERSION	90 V AC	240 V AC	
DC VERSION	10 V DC	15 V DC	
POWER CONSUMPTION	9 W		Typical 7 W during operation

NOTE 1: Measured against a 100 ppm toluene standard at standard temperature and pressure; accuracy can be further improved at points of interest, using bespoke calibration. **NOTE 2:** Climate control might be needed depending on process and ambient conditions

TYPICAL TARGET SUBSTANCES

Petroleum Gas	Methane	Iso Butane	Kerosene	Ethanol
Diesel	Iso-butylene	Toluene	Acetone	Xylene
Heptane	Benzene	Methanol	Mercaptan	

CONSUMABLES

6 Months: Air Filters, Restrictor
As required: Air Pump, usually every 18-36 months

SERVICE

Service is necessary every 6 months to keep the instrument operating in optimal conditions. Service should be carried out by a trained technician who has undergone the standard Multisensor Systems training course.



PRINCIPLE OF OPERATION

The system samples the air continuously which is then passed through the sensor which reacts with VOCs and measures their concentration.

The concentration is then reported via the analogue output. The instrument provides a reading via the 4-20 mA output continuously.

The MS1800 measures the concentration VOC gas measured against a target gas standard (usually toluene)

The MS1800 incorporates a relay which is switched at a user definable threshold. This can be hardwired to valves/pumps and so on to stop processes very quickly. Alternatively the users SCADA system can also be used.

ORDERING INFORMATION

Every MS1800 is shipped with the instrument, electronic manual and calibration certificate. Standard configuration of the instrument is 90 - 240 V AC.

Base Analyser

0-000024	MS1800 VOC Gas Analyser, 90 - 240 VAC, 4-20 mA output
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Common Consumables

7-000794	Gasket Continuous Mode
7-000509	Fixed air flow restrictor
7-000504	In line filter 5µ
7-000327	Pump BLDC

For a detailed quote get in touch with Multisensor Systems Ltd or an [approved distributor](#).

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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 Analyzers specialising in oil in water, hydrocarbon analyzers, oil in water detectors, THM Analyzers and Ammonia Analyzers based in the United Kingdom.

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CHANGELOG

MSS DOCUMENT CHANGE RECORD

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