

# SA-100/1000

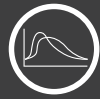
SIDE-STREAM OIL IN WATER ANALYSER



Ultrasonics



Fluorescence



Spectroscopy

The SA-100/1000 is a side-stream Oil in Water analyser suitable for non-hazardous areas; it uses fluorescence to provide continuous accurate measurements of oil concentrations in water. Reliable real-time data enables operators to take accurate discharge measurements and to improve efficiency of separation processes, enabling cost reductions. The SA is ideally suited for refineries, marine, industrial and waste water oil in water monitoring.

In addition to the SA-100 features, the SA-1000 model offers spectral analysis.


## BENEFITS

- No user required maintenance
- Consistent accurate performance
- No sample conditioning system required
- Accurate OiW measurements over the laser lifetime of 18 months. No recalibration required and no degradation of signal over the period of 18 months
- Same sample used for analyser and lab measurement for better accuracy
- During process shut down, the analyser can be turned to standby mode through remote digital input. Analyser outputs accessible remotely via HART/MODBUS or Ethernet
- Changes in fluorescence spectra provides indication of process changes
- PPM accuracy achieved for multiple oil types

## FEATURES

- Adaptive Ultrasonic Cleaning
- Laser Induced Fluorescence [LIF]
- Optional integrated laboratory sample point
- Remote management and diagnostics
- Easy to install
- Spectrometer [with SA-1000 model]
- Oil type switching [with SA-1000 model]



Measurement Performance	
Measurement principle	Laser Induced Fluorescence (LIF)
Cleaning	Ultrasonic (automatic)
Range	0-20,000 ppm*
Repeatability	±1% of full-scale range
Accuracy	±1% of full-scale range***
Response time	1 Second, continuous results
Operating Conditions	
Process temperature	Up to 100°C
Process pressure (MAWP)	Up to 20 bar <sub>g</sub>
Process flow	Up to 25 l/m**
Operational ambient temperature	-20°C to +55°C
Utilities	
Power supply	110 or 230 VAC (Pre-configured)
Power frequency	50 or 60Hz
Power consumption	60 W normal, 300 W peak
Certification	
Ingress protection	IP66 / NEMA 4X
CE Compliant	
Analyser	IMO MEPC-107 (49), ABS Type Approval
Weight & Dimensions (for shipping)	
Weight (including stand)	75kg
Dimensions	L 92 cm x W 83 cm x H 148 cm
Communications	
4-20 mA (1)	Passive, Configurable for measurement readings/temperature
Digital Input (1)	Start/Stop cycle control
Digital Output (s)	Configurable as alarm contacts
Remote access	Windows Remote Desktop
Internal data storage	>10 years
Security	2 level password protection
Optional Communications	
Additional 4-20mA	Passive, Configurable for measurement readings/temperature
HART	Yes
Modbus RTU	Implemented via HART to Modbus converter
Extended Ethernet	2 wire connection, capable of 1.3km distance
Additional Information	
Pipe diameter	1/2" contact AS for other requirements
Wetted parts	316L SS
Enclosure Material	316L SS

\* Dependent on sample matrix & instrument configuration. User may select any desired measurement from 0-10ppm, 0-100ppm [...] up to 20,000ppm.

\*\* Flow rate through the analyser measurement chamber. Flow control may be implemented external to the analyser to manage higher flow rates.

\*\*\*Under ideal conditions, with a homogenised sample.