

# SA-100/1000

SIDE STREAM OIL IN WATER ANALYZER



Ultrasonics



Fluorescence



Spectroscopy

The SA-100/1000 is a side stream Oil in Water analyzer 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 marine, industrial and waste water oil in water monitoring.

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

## FEATURES

- Patented ultrasonic cleaning
- Laser Induced Fluorescence (LIF)
- Configurable measurement ranges (0-10 ppm, 0-100 ppm [...] up to 20,000 ppm)
- Measurement repeatability  $\pm 1\%$  of full scale
- Remote management and diagnostics
- Easy to install (no sample conditioning)
- Multiple communications options - 4-20 mA, HART, Modbus, Extended Ethernet
- Meets stringent IMO requirements for bilge discharge monitoring
- Optional integrated spectrometer
- Secure access with (2) levels
- Operates using Microsoft Windows 7
- Auto-tuning functionality
- Viewing window of sample chamber
- Digital Input & Output

## BENEFITS

- Robust and reliable
- Easy to use
- Low Cost of Ownership (COO) with no routine maintenance
- No degradation of signal or recalibration required
- Side stream format offers localized sample control
- Remote control and monitoring (suitable for un-manned locations and remote process monitoring)
- Instantaneous measurements
- Sample point facilitates laboratory correlation



<b>Measurement Performance</b>	
Measurement principle	Laser Induced Fluorescence (LIF)
Cleaning	Ultrasonic (automatic)
Range	0-20,000 ppm*
Repeatability	±1% of full scale range
Response time	1 Second, continuous results
<b>Operating Conditions</b>	
Process temperature	Up to 100°C
Process pressure	Up to 15 barg
Process flow	5-25 l/min
Operational ambient temperature	-20°C to 50°C
<b>Utilities</b>	
Power supply	110 or 230 VAC (Pre-configured)
Power frequency	50 or 60Hz
Power consumption	60 W normal, 300 W peak
<b>Certification</b>	
Ingress protection	IP65
Enclosure material	316L SS
Analyzer	IMO MEPC-107 (49)
<b>Weight &amp; Dimensions (for shipping)</b>	
Weight (including stand, standard pneumatic Stainless Steel valve assembly, termination box and isolation switch)	47 kg
Dimensions	L 77 cm x W 57 cm x H 55 cm
<b>Communications</b>	
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
<b>Optional Communications</b>	
Second 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 1.6Km distance
<b>Additional Information</b>	
Pipe diameter	1/2"
Wetted parts	316L SS
Piping connections	NPT female threaded

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