

SA-100P(2) / 1000P(2)



Ultrasonics



Fluorescence



Spectroscopy

Inline Oil in Water Analyzer

The SA-100P and the SA-100P2 are respectively single and dual inline probe Oil in Water analyzers suitable for non hazardous areas; they both use fluorescence to provide continuous accurate measurements of oil concentrations in water. The additional probe on the SA-100P2 allows monitoring of two process points simultaneously with dual readings displayed on the analyzer. Reliable real-time data enables operators to take accurate measurements and to improve efficiency enabling cost reductions. The SA Series is ideally suited for marine, industrial and general waste water monitoring.

In addition to the standard probe features, the 1000 models offer spectral analysis.

Features

- Patented ultrasonic cleaning
- Laser Induced Fluorescence (LIF)
- Inline probe format; 730mm standard (other lengths optional)
- Various measurement ranges configurable up to 0-3,000ppm; higher ranges on request
- Measurement repeatability $\pm 1\%$ of full scale range
- Remote management and diagnostics
- Easy to install (no sample conditioning required)
- Multiple communications configurations – 4-20mA, HART, Modbus, Extended Ethernet
- Second probe for simultaneous dual measurement (SA-100P2/1000P2)
- Touch screen interface
- Password control
- Optional extraction tool for hot insertion/extraction of the probe
- Optional integrated spectrometer

Benefits

- Easy to use
- Low Cost of Ownership (COO) with no routine maintenance
- No degradation of signal or recalibration
- Inline probe allows for analyzer to be located up to 50m from probe location
- Inline probe is installed directly into process pipe
- Remote control and monitoring (ideal for un-manned locations and remote process monitoring)



Measurement Performance	
Measurement principle	Laser Induced Fluorescence (LIF)
Range	0-3,000ppm
* User may select any desired measurement from 0-10ppm, 0-100ppm [...] up to 0-3,000ppm	
Repeatability	±1% of measurement range
Response time	1 Second, continuous results
Operating Conditions	
Process temperature	Up to 200°C
Process pressure	Up to 35 barg
Process flow	Nominal 10m/s
Operational ambient temperature	-20°C to 55°C
Cleaning	Ultrasonic (automatic)
Spectrometer Specifications (1000 models only)	
Emission wavelength range	400-1,100nm
Resolution	0.5nm
Power consumption	60W normal, 300W peak
Utilities	
Power supply	110 or 230 VAC (pre configured)
Power frequency	50 or 60 Hz
Power consumption	60W normal, 300W peak
Certification	
Ingress protection	IP65 for enclosure and IP66 for probe (except IP68 for wetted portion)
Enclosure material	316L SS
Analyzer	IMO MEPC-107(49)
Weight & Dimensions	
Weight (including stand, 3m conduit probe, 2" 150lb extraction tool)	61kg +16.5kg per 730mm probe or +18.6kg per 980mm probe
Dimensions	420W x 220D x 330H mm
Clear space	450mm front and rear
Communications	
4-20mA (2)	Passive
Ethernet	Standard
HART, Modbus, Extended Ethernet	Optional*
Digital Input (1), Digital Outputs (4)	Standard
Remote access	Standard
Internal data storage	>10 years
Security	Multiple level password protection
Additional information	
Hot insertion/extraction	Optional
Flange fitting	2" ANSI RF standard
Dual probe (SA-100P2/1000P2)	Allows dual simultaneous measurement
Conduit length	3 – 33m
Maintenance	None – Automatic cleaning
Display	Touch screen PC LCD Display
Wetted parts	316L SS

* HART - PPM internal temperature, flow status - START cycle and STOP cycle functionality only

* MODBUS RTU only; implemented via HART to MODBUS converter