

# EX-100P/P2 - 1000P/P2

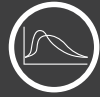
INLINE OIL IN WATER ANALYSER



Ultrasonics



Fluorescence



Spectroscopy

The EX-100P and the EX-100P2 are respectively a single and dual inline probe Oil in Water analyser that uses fluorescence to provide continuous accurate measurements of oil concentration in water. The additional probe on the EX-100P2 allows monitoring of two process points simultaneously with dual readings displayed on the analyser. Reliable real-time data enables operators to take accurate measurements and to improve efficiency, enabling cost reductions.

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

Typical Applications include discharge management, oil refineries, process improvement, cooling water, waste-water treatment and leak detection. Please talk to ASL about your specific application.





## BENEFITS

- No user required maintenance
- Consistent accurate performance
- No sample conditioning system required. Inserted directly in process pipe
- Accurate OiW measurements over the laser lifetime of 18 months. No recalibration required and no degradation of signal over the period of 18 months
- During process shut down, the analyser can be turned to standby mode through remote digital input. Analyser outputs accessible remotely via HART/MODBUS, Ethernet or 4-20mA
- Changes in fluorescence spectra provide indication of process changes
- PPM accuracy achieved for multiple oil types
- Simultaneous display of two stream measurements in one device. Effective means of monitoring performance of separation equipment both inlet and outlet
- With double block and bleed valve, probe can be inserted/removed without process shut down

## FEATURES

- Adaptive Ultrasonic Cleaning
- Laser Induced Fluorescence [LIF]
- Remote management and diagnostics
- Easy to install
- Spectrometer [with EX-1000P model]
- Oil type switching [with EX-1000P model]
- Dual probe [with EX-100P2 / EX-1000P2 model]
- For the option of hot insertion/extraction, an extraction tool and gear box is recommended for pressures in the range 3-5 bar. For pressures above 6 bar a gear box is essential for hot insertion/extraction



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 200°C	
Process pressure (MAWP)	Up to 100 bar <sub>g</sub>	
Flow Velocity	Nominal 10 m/s	
Operational ambient temperature	-20°C to +55°C	
Spectrometer Specification (1000 models only)		
Measurement wavelength range	400-1,100 nm	
Resolution	0.5 nm	
Utilities		
Power Supply	110 or 230 VAC (Pre-configured)	
Power Frequency	50 or 60 Hz	
Power Consumption	60 W normal, 300 W peak	
Certification		
Ingress Protection Probe	IP66**/ IP68 for wetted portion of probe	
Ingress Protection Enclosure	IP66 NEMA 4X	
Analyser	 II 2G 	Ex db [op is IIC T4 Gb] IIB T4 Gb Ta = -20°C to +55°C
	Canada + USA:	
	IMO	MEPC-107 (49), ABS Type Approval
	Brazil / Russia	INMETRO / EAC
Probe	 II 2G 	II 2G EXdb op is IIB T5 Gb Ta= -20°C to +55°C Max. liquid temperature 100°C Or Ex db op is IIB T3 Gb Ta= -20°C to +55°C Max. liquid temperature 200°C
	CE Compliant	
Weight & Dimensions (for shipping)		
Weight (including stand, termination box and isolation switch)	Single probe	200kg
	Dual probe	220kg
Dimensions	L 92 cm x W 83 cm x H 148 cm (except 980mm probes) L 92 cm x W 83 cm x H 176 cm (with 980mm probes)	
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
<b>Optional Communications</b>	
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
<b>Additional Information</b>	
Hot insertion/extraction	Up to 100 bar <sub>g</sub>
Flange fitting	2" ANSI RF (various flange ratings available upon request)
Wetted parts	316L SS (other materials available upon request)
Enclosure Material	316L SS
Conduit length	Up to 50m <sup>†</sup>
Dual probe (EX-100P2/1000P2)	Allows dual simultaneous measurement

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

\*\*IP68 rated design available upon request.

† Please contact ASL to discuss conduit length over 30m.

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

## Contact Us

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**UK headquarters:**  
8 Meadowbank Road  
Carrickfergus  
N.Ireland  
BT38 8YF  
UK

**Email:** [sales@advancedsensors.co.uk](mailto:sales@advancedsensors.co.uk)

**Tel:** +44(0) 28 93 32 89 22

**Web:** [www.advancedsensors.co.uk](http://www.advancedsensors.co.uk)

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