

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



Ultrasonics



Fluorescence



Spectroscopy

## Inline Oil in Water Analyzer

The EX-100P and the EX-100P2 are respectively a single and dual inline probe Oil in Water analyzers that use 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 analyzer. 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.

## Features

- Patented ultrasonic cleaning
- Laser Induced Fluorescence (LIF)
- Inline probe format
- Second probe for simultaneous dual measurement (EX-100P2/1000P2)
- Effective means of monitoring performance of separation equipment both inlet and outlet (EX-100P2/1000P2)
- Both readings available on screen and via output signals (EX-100P2/1000P2)
- Double block & bleed valve hot insertion/extraction device
- Various measurement ranges configurable (0-10ppm [...] up to 0-20,000ppm)
- Measurement repeatability  $\pm 1\%$  of full scale range
- Remote management and diagnostics
- Easy to install (no sample conditioning required)
- Multiple communications options – 4-20mA, HART, Modbus, Extended Ethernet or WiFi
- Optional integrated spectrometer

## Benefits

- Easy to use
- Simultaneous measurement of two streams for one device (EX-100P2 and EX-1000P2)
- Low Cost of Ownership (COO) with no routine maintenance
- No degradation of signal or recalibration required
- Inline probes allows for analyzer to be located up to 33m from probes location
- Inline probes are installed directly into processes pipes
- Remote control and monitoring (ideal for un-manned locations and remote process monitoring)



<b>Measurement Performance</b>	
Measurement principle	Laser Induced Fluorescence (LIF)
Range	0 - 20,000ppm*
* Dependent on sample matrix & instrument configuration	
Repeatability	±1% of measurement range
Response time	1 Second, continuous results
<b>Operating Conditions</b>	
Process temperature	Up to 200°C
Process pressure	Up to 35 barg
Flow Velocity	Nominal 10m/s
Operational ambient temperature	-20°C to 55°C
Cleaning	Ultrasonic (automatic)
<b>Spectrometer Specification (1000 models only)</b>	
Emission wavelength range	400-1,100nm
Resolution	0.5nm
<b>Utilities</b>	
Power Supply	110 or 230 VAC (pre configured)
Power Frequency	50 or 60 Hz
Power Consumption	60W normal, 300W peak
Instrument Air	Not Required
<b>Certification</b>	
Ingress protection	IP66 / IP68 for wetted portion of probe
Enclosure material	316L SS
Analyzer	CE compliant, ATEX, IECEx, INMETRO (for SS enclosure only), Class 1 Division 1 (groups C&D; T3&T4), Class 1 Division 2 (groups A, B, C, D; T4), Class 1 Zone 1 (T3&T4), IMO resolution MEPC.107 (49)
<b>Weight &amp; Dimensions</b>	
Weight (including stand, 3m conduit, probe, 2" 150lb extraction tool, termination box and isolation switch)	<b>EX-100P2/1000P2 (Stainless Steel Enclosure):</b> 107Kg +16.5Kg per 730mm probe or + 18.6Kg per 980mm probe
Dimensions	600W x 640D x 1120H mm for Stainless Steel Enclosure
Clear space	500mm front and rear
<b>Communications</b>	
4-20 mA (2)	Passive
Ethernet	Standard
HART, Modbus, Extended Ethernet	Optional**
Digital Input (1), Digital Output (4)	Standard
Remote access	Standard
Internal data storage	>10 years
Security	Multiple level password protection
<b>Additional Information</b>	
Hot insertion/extraction	Optional
Flange fitting	2" ANSI RF standard
Wetted parts	316L SS (other materials available upon request)
Conduit length	3m – 33m
Dual probe (EX-100P2/1000P2)	Allows dual simultaneous measurement

\*\* HART - PPM internal temperature, flow status - START cycle and STOP cycle functionality only  
MODBUS RTU only; implemented via HART to MODBUS converter