

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)



Measurement Performance	
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
Operating Conditions	
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)
Spectrometer Specification (1000 models only)	
Emission wavelength range	400-1,100nm
Resolution	0.5nm
Utilities	
Power Supply	110 or 230 VAC (pre configured)
Power Frequency	50 or 60 Hz
Power Consumption	60W normal, 300W peak
Instrument Air	Not Required
Certification	
Ingress protection	IP66 / IP68 for wetted portion of probe
Enclosure material	316L SS
Analyzer	ATEX Ex II 2G Ex d/de IIB T3/T4 Gb, IECEX, USA and Canada Class 1 Div 1, IMO MEPC 107 (49)
Weight & Dimensions	
Weight (including stand, 3m conduit, probe, 2" 150lb extraction tool, termination box and isolation switch)	EX-100P2/1000P2 (Stainless Steel Enclosure): 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
Communications	
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
Additional Information	
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