

EX-100P / 1000P



Ultrasonics



Fluorescence



Spectroscopy

Inline Oil in Water Analyzer

The EX-100P is an inline probe Oil in Water analyzer that uses fluorescence to provide continuous accurate measurements of oil concentrations in water. Reliable real-time data enables operators to take accurate measurements and to improve efficiency enabling cost reductions.

The EX-1000P offers the same features as the EX-100P with the addition of spectral analysis.

Features

- Patented ultrasonic cleaning
- Laser Induced Fluorescence (LIF)
- Inline probe format
- Double valve hot instertion/extraction device
- Various measurement ranges configurable (0-100ppb, 0-10ppm, 0-1,00ppm [...] up to 0-20,000ppm)
- Accuracy: $\pm 1\%$ and measurement repeatability 99%
- Remote management and diagnostics
- Easy to install (no sample conditioning)
- Multiple communications configurations - 4-20mA, HART, Modbus, Extended Ethernet or WiFi
- Optional second probe for simultaneous dual measurement (see EX-100P2/1000P2 datasheet)
- Optional integrated spectrometer

Benefits

- Easy to use
- Low Cost of Ownership (COO) with zero 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 - 20,000ppm
* User may select any desired measurement from 0-100ppb, 0-10ppm, 0-100ppm [...] up to 0-20,000ppm	
Accuracy	±1% of measurement range
Repeatability	> 99%
Response time	< 1 Second, continuous results
Operating Conditions	
Process temperature	0°C to 200°C
Process pressure	0-35 barg (180 barg optional)
Process flow	0 to 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	IP68 Probe, IP66 Enclosure
Enclosure material	Aluminium (SS 316L optional)
ATEX Exd II 2 G IIB T4, IECEx, USA and Canada Class 1 Div 1	Purged air not required
IMO MEPC-107 (49)	IMO Certified, ABS, US Coast Guard
Weight & Dimensions	
Weight	85kg + inc. stand (approx +30kg for Stainless Steel Enclosure)
Dimensions	600W x 640D x 1112H mm (1120H mm for Stainless Steel enclosure)
Clear space	500mm front and rear
Communications	
4-20 mA	Passive
Ethernet	Standard
HART, Modbus, Wireless (WiFi), Extended Ethernet	Optional
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	SS 316L (option of CR22, CR25, Monel, Inconel, Hastelloy, Titanium)
Dual Probe (EX100P2/1000P2)	Optional (allows dual simultaneous measurement)
Conduit length	3m – 50m