# LAPPLIED ANALYTICS

## OiW-100 Oil-in-Water Analyzer

Continuous monitoring of total petroleum in effluent water.

- » UV-Vis full-spectrum spectrophotometer
- » Solid state with no moving parts
- » Correlates absorbance of aromatic hydrocarbons precisely to total oil concentration
- » Fiber optic cables transmit signal to/from sample
- » Xenon light source with 5 years average lifespan
- » No consumables or reagents
- » Huge dynamic range 0-10 ppm and 0-100% all in one instrument
- » Water background is completely transparent in the UV spectrum



Measurement:

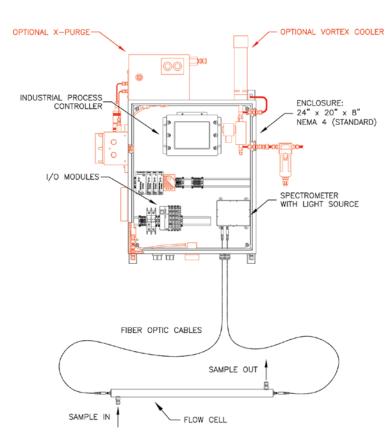


#### OiW-100 Analyzer Specifications

**Note:** All performance specifications herein are subject to the assumption that all design for integration and sample conditioning is first approved by Applied Analytics.

Detector	nova-II™ UV-Vis diode array spectrophotometer
Methodology	Correlation of total aromatics' absorbance
Light Source	Pulsed Xe lamp (average 5 year lifespan)
Fiber Optic Cables	Standard: 1.8 meter 600 µm core fibers (qty=2) Longer lengths available.
Sample Phase	Homogenous mixture
Sample Cell	Standard: SS316 flow cell (length from 2 mm to 600 mm) Other materials available.
Sample Conditioning	Custom design if needed
Accuracy	Common range below; custom ranges available. 0-20 mg/L: ±2% full scale
Analyzer Calibration	Calibrated on sample of process water from site
Verification	Simple verification with samples or neutral density filters
Ambient Temperature	Low Range (<1000 ppm): 0 to 40 °C (32 to 104 °F) High Range (>1000 ppm): 0 to 55 °C (32 to 131 °F) w/ Temperature Control: -20 to 55 °C (-4 to 131 °F)
Sample Temperature	Using in situ probe: -20 to 200 °C (-4 to 392 °F) Using standard flow cell: -20 to 150 °C (-4 to 302 °F) Wider ranges available.
Sample Pressure (max.)	Using standard flow cell: 206 bar (3,000 psi)
Electrical	85 to 264 VAC 47 to 63 Hz
Power Consumption	45 Watts
User Interface	Touch-screen industrial controller with 640x480 LCD
Standard Outputs	1 galvanically isolated 4-20mA output per measurement 2 digital outputs for fault and SCS control
Optional Outputs	Modbus TCP/IP; RS-232; Fieldbus; Profibus; HART; more
Wetted Materials	Various custom materials available. Standard: K7 glass, Viton, stainless steel 316L
Environment	Indoor/Outdoor — no shelter required
Certifications	General Purpose Class I, Division 1 — optional Class I, Division 2 — optional ATEX Exp II 2(2) GD — optional Any other certification — please inquire

### OiW-100 Analyzer (common options shown in red color)



Weight	Analyzer: 32 lbs. (15 kg)
Size	Analyzer: 24" H x 20" W x 8" D (610 x 508 x 203 mm)
Enclosure	Various enclosures available. Standard: wall-mounted carbon steel NEMA 4 enclosure

MADE IN THE USA

LAST REVISION: FEBRUARY 2013



A registered trademark of Applied Analytics Group BV. | www.a-a-inc.com

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