

Oil in Water **Analytical Experts**





Spectroscopy

The PD-1000 is an incredibly powerful Oil in Water analyser, that can conveniently measure crude oil in water where sample access is available. Sample pre-treatment is not necessary and readings are displayed in secs. A cuvette-based measurement arrangement, with spectral analysis, enables a wide measurement range with high repeatability.

APPLICATIONS

- Produced water performance optimisation
- · Tank farm and storm water quality monitoring
- GOSP treated water process monitoring

BENEFITS

- · Instantaneous measurement: no sample pre-treatment or preparation required
- · Spectral signature analysis allows oil recognition, even in the presence of chemicals
- Measurement data logs can be shared via email, Bluetooth, Wi-Fi or USB
- Remote access to calibration file library
- · Easily switch between saved calibrations, either automatically or manually.

FEATURES

- · Accommodates direct Oil in Water Measurement and Measurement Post Solvent Extraction
- Laser Induced Fluorescence (LIF)
- Integrated spectral signature analysis
- · Incorporated touch screen with auto- orientation
- Rechargeable battery with up to 5 days battery life
- · Intuitive software for measurement and calibration
- Bluetooth and Wi-Fi communications
- Portable and light weight (1.2kg)
- Results can be correlated to laboratory reporting methods (e.g. EPA 1664)

Advanced D-1000

PD-1000

TECHNICAL SPECIFICATION

Measurement Performance	
Measurement principle	Laser Induced Fluorescence (LIF)
Range*	0-3000ppm
Repeatability*	+/-1% of measurement range
Accuracy**	+/-1% of measurement range
Emission wavelength range	Selectable between 400-1100nm
Resolution	0.5nm
Response time	typically < 1 sec
Operating Conditions	
Operational ambient temperature	-0°C to 40°C
Utilities	
Power	Universal input 90 to 260VAC, 47 to 63Hz (6VDC, 3A)
Battery (3000mAH) charge time	1hr 20min 'Turbo charge'
Battery life	Continuous Measurement – 4 hours Typical usage – 2 days Standby – 5 days
Certification	
CE	Low Voltage Directive 2014/35/EU EMC Directive 2014/30/EU
North American Standards	21 CFR 1040.10 and 1040.11 Performance Standards for Light Emitting Products.
Weight & Dimensions (for shipping)	
Package Dimension	350 x 300 x 160 (mm)
Package Weight	3.5 kg
PD-1000 Dimensions	173x121x549 (mm)
PD-1000 Weight	1.35 kg
Cuvette Used	Semi-micro Methacrylate (PMMA) Cuvette Max Capacity 3mL (42x12.5x12.5 mm)
Communications	
WLAN	Wi-Fi 802.11 a/b/g/n, dual-band, Wi-Fi Direct, hotspot
Bluetooth	4.2, A2DP, LE, EDR
USB	2.0 USB Type C 1.0 (reversible connector)
Internal Data Storage	16GB
Security	Password Protection
Platform	
OS	Android 9.0 (Pie)
Display	IPS LCD Capacitive touchscreen 16M Colours
Size	5.7 inch
Display Protection	Corning Gorilla Glass 3
Enclosure material	Aluminium

Laser Radiation. Avoid direct eye exposure. Class 3R Laser product.

* Oil type dependent.

** Dependent on the sample homogenisation.

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