INOV8™
Customer Inspired Innovation

GPS-M Oil in Water Analyser

Side Stream - Microscopy & Fluoresence

Customer inspired innovation

Leveraging decades of innovation experience for the Oil & Gas industry, Inov8 Systems introduce the next generation of products for an evolving market with dynamic demands.

The GPS-M combines high-speed CCD imaging microscopy and fluorescent spectroscopy to deliver precise oil and particulate-in-water analysis. Featuring automatic RapidWave™ ultrasonic cleaning to eliminate manual maintenance , this side-stream analyser provides reliable, real-time concentration and dimensional data across demanding process conditions.

Features

- Dual Microscopy & Fluorescence Technology
- Automatic **RapidWave**™ Ultrasonics
- Side-Stream / On-Line Installation
- Extended Logfile Storage
- 316L Stainless Steel Enclosure
- Flexible Power Supply Options

Benefits

- Comprehensive Particulate & Oil Detection
- Eliminates Manual Maintenance
- Real-Time In-Flow Monitoring
- Long-Term Data Tracking
- High Durability in Harsh Environments
- Versatile Field Integration

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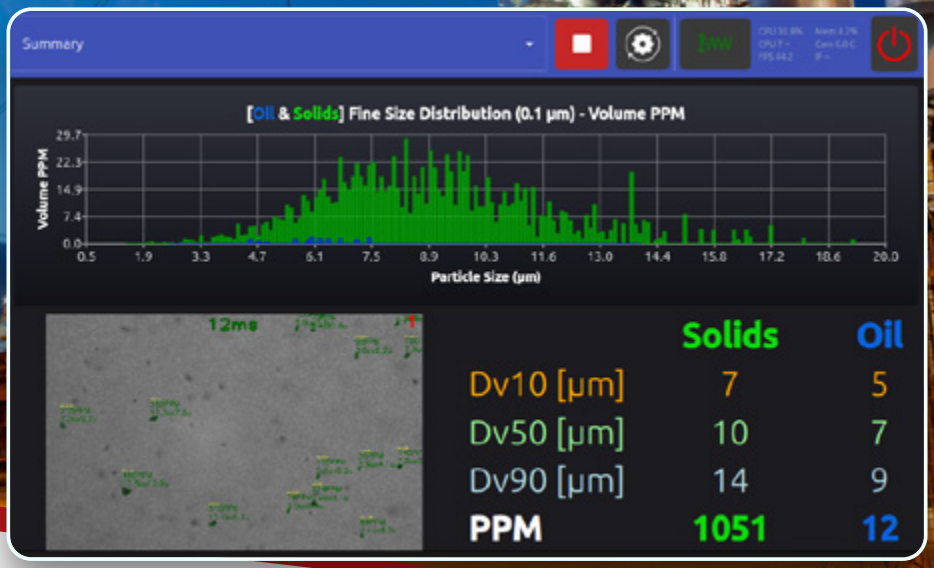

Technical Specifications

SPECIFICATION

Microscopy Illumination & Measurement Principle - Oil concentration	Synchronised Strobed Light Source & Fluorescent Spectroscopy
Installation	Side-stream / on-line in flow

CONCENTRATION MEASUREMENT

Oil Range	0-5000 PPM
Calibration	Calibrated with controlled samples of known dimensions and concentrations
Microscopy Repeatability	+/- 5% of calibrated range
Fluorescence Repeatability	+/- 2% Calibrated Range
Units of measure	PPM and Mg/l

SIZE RANGE

Dimensional range	1um-250um
Repeatability	+/- 4% of full scale
Calibration	Utilising known bead sizes and known made up concentrations

DATA STORAGE

Image storage	Images stored based on user requirements

UTILITIES

Power supply	110/240VAC or 24 VDC 10A
Power frequency	50-60Hz
Power consumption	190W Max. Nominal 70W

CERTIFICATION

Ingress protection	IP66
Analyser Certification	CE

OPERATING CONDITIONS

Process temperature	0-50°C
Process pressure (MAWP)	2 Bar process and 5 Bar design pressure (process pressure can be controlled)
Process flow	0.5-10 l/m
Operational ambient temperature	0-50°C
Cleaning	Automatic **RapidWave**™ ultrasonics

WEIGHT & DIMENSIONS (SHIPPING)

Weight (including stand, termination box and isolation switch)	28Kg
Dimensions (On a stand)	1210x450x450 mm
Dimensions (Stand alone)	950x400x150 mm

COMMUNICATIONS

4-20 mA	2, Passive / Loop-Powered
Digital Input	3
Digital Output(s) (dry contact)	2
Remote access	Yes
System data storage	Logfiles >5 years

OPTIONAL COMMUNICATIONS

Modbus TCP/IP	Yes
Remote Access	TBC-TeamViewer (End User account needed)

ADDITIONAL INFORMATION

Fittings	3/4 inch NPT
Wetted parts	Standard 316L SS, others available on request
Enclosure Material	316L SS

Patent number 2580699 (UK)
Patent number 2600454 (UK)
Patent number 2614934 (UK)
Patent Number 3127511 (CA)
Patent Number 11994461 (US)
Patent number 3914898 (EU)
Patent Number 2798310 (RU)