LEMIS process

250 SERIES

DIGITAL PORTABLE SUBMERSIBLE

OIL/WATER CONTROLLER

OWM-250.1

IN PROCESS TO EXCELLENCE

From theory to practice

The OWM 250 series is based on a principle of a dipole measurement via water molecule, as water has a considerable amount of absorption.

Coefficient and a high frequency

The principle would be demonstrated by an ultrahigh frequency band with up to 3.5 GHz. This would determine the presence of the moisture within a given petroleum product that uses a water-oil emulsions. This is a complex permeability within a high-frequency and an ultrahigh frequency with a band width that consists from 0.5 to 3.5 GHz measuring method. The measuring principle of the OWM 250 series is based upon the measurements of electromagnetic energy losses in a given water-oil emulsion. Based on this principle the OWM 250 series is unique and most efficient in its class compared to other OWM meters. Rigorous factory testing and calibration secure high accuracy that is not affected by any flow rates.

Specifications

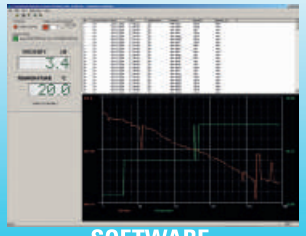
Measuring range:	
Emulsion Concentration	0 to 100%
Temperature	-40… +85°C (-40... +185°F)
Accuracy:	
Emulsion Concentration	OWC 2505: ±0.5% OWC 2510: ±1%
Temperature	±0.1°C (±0.2°F) or ±0.2°C (±0.4°F)
Repeatability:	
Emulsion Concentration	OWC 2505: ±0.3% OWC 2510: ±0.5%
Temperature	±0.1°C (±0.2°F)
Resolution:	
Emulsion Concentration	0.1%
Temperature	0.01°C (0.02°F)
Supported measuring units	Temperature in °C or °F
Ambient temperature	-40… +85°C (-40... +185°F)
Depth of submersion	Up to 6 meters (20 ft.)
Sensor:	
Material	Stainless steel SS 316 L; NiSpan C; Hastelloy C22
Intrinsically safe:	
Controller	ATEX II (2G) EEx ib [ia] IIB T4
Sensor	ATEX II 1G EEx ia IIB T4
Power supply	NiMH 3.6V-1200 mAh
Operating time without charging	Appr. 12 hours
Dimensions, weight:	
Controller	180 x 80 x 40 mm (7.1 x 3.2 x 1.6 in), 0.6 kg (1.3 lb)
Sensor	220 x ø25 mm (8.7 x ø1.0 in), 0.7 kg (1.5 lb)
Temperature compensation	Automatic
Viscosity compensation	Automatic
Data handling	Backlighted LCD display (2x16) Local memory up to 1980 results with date/time stamped Build in Bluetooth for data transfer to printer or PC Optional Windows - based software
Delivery	Delivered in compact carrying case

Advantages

- Real-time measurements, high accuracy
- Easy to clean
- Compact, portable design
- Simple installation
- No additional maintenance required
- No nuclear (radioactive) sources
- Rigorous factory testing and calibration
- Easy to transport
- Competitive price

Applications

- Petroleum industry
- Antifoam and demulsifier chemical feed systems
- Waste water treatment
- Desalter control
- Automatic tank dewatering



SOFTWARE

Data transmission to PC, pocket PC or portable printer via Bluetooth connection. Compatible for a Windows XP/Vista/7.

For more information please visit www.lemis-process.com

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001

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