



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

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



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

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