

**PROCESS IN-LINE**

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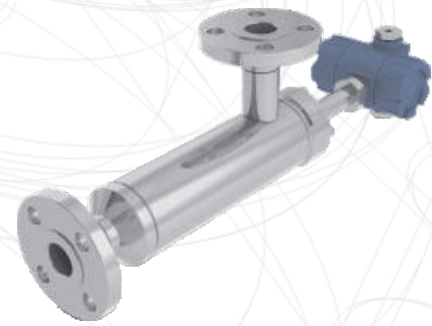
**WATERCUT MONITORS**

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**OWC-51**

**IN PROCESS TO EXCELLENCE**

# Specifications



## From theory to practice

The OWC 51 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. As the measuring principle of the OWC 51 series is based upon the measurements of a electromagnetic energy losses in a given water-oil emulsion. Based on this principle the OWC 51 series is unique and most efficient in its class compared to other OWC meters. Rigorous factory testing and calibration secure high accuracy that is not affected by any flow rates.

Process Temperature	0°C to +100°C (+32°F to +212°F) - Standard 0°C to +232°C (+32°F to +450°F) - High temperature		
Salinity	0 to 30% by weight		
Temperature Accuracy	±0.1°C (±0.2°F)		
Pressure Range	Standard 20 Bar (300 psig)		
Viscosity Effect	Automatically compensated		
Process Connection	Large selection of flanges is available		
Ambient Temperature	-40°C to +80°C (-40°F to +176°F)		
Weather Rating	IP68		
Sensor Material	Stainless steel 316L; Ni-Span C; Hastelloy C22		
Power Supply	115-240V AC 50-60 Hz or 12/24V DC;		
Analog Output	4 - 20 mA		
Digital Output	RS 485 Modbus		
Quality Assurance	ISO 9001:2000		
Factory Calibration	Calibration certificates supplied as standard		
CE Mark	Compliant EN 61326 ; EN5011 ; EN 50082-2		
ATEX	II 1G EEx ia IIB T4; II 1G EEx ia IIC T5		
IEC	IEC Ex ia IIB T4 Ga/Gb		

Model Variations	Water Concentration	Absolute Accuracy	Repeatability
OWC 5101	0 to 5%	±0.05%	±0.1%
OWC 5105	0 to 10%	±0.05%	±0.1%
OWC 5110	0 to 20%	±0.10%	±0.1%
OWC 5120	0 to 20%	±0.20%	±0.1%

### 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
- Not affected by flow regimes

### Applications

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

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



SOFTWARE



BLUETOOTH PRINTER



POCKET PC

**For more information please visit [www.lemis-process.com](http://www.lemis-process.com)**



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