

MExIA

PARTICLE ANALYZER AND CONTROL COMPUTER

The MExIA is the market leading analyzer for produced water and injection water quality monitoring in the oil and gas production sectors.

CERTIFIED FOR HAZARDOUS ENVIRONMENTS

This compact integrated unit features an air purged stainless steel enclosure with ATEX Zone I certification. The MExIA uses instrument air to achieve the hazardous area rating as well as a constant temperature within the enclosure in hot working environments.

DURABLE FLOW CELL

The flow cell is rated for continuous use at 120 Bar (1740 PSI/12000 kPa) and is capable of operating up to 120 °C (248 °F), making the analyzer ideal for use in harsh environments. The MExIA is able to work with flow velocities up to 5 meters/second to ensure great response to process changes and minimal flow control requirements.

PORTABLE PARTICLE ANALYSIS

The compact form of the analyzer can be installed close to the sample point or used as a portable process optimization tool. The MExIA is supplied with fully featured control software capable of complex particle analysis. The analyzer uses digital communication for process variables and has an easily accessible USB port for transferring data from the analyzer when required.

ACCESSORIES

- Sampling hoses suitable for a range of sample pressures
- Hazardous area transformers to enable operation from alternative voltages
- Flight cases for easy transportation of this robust investigative tool

Measures oil and solid particle size and concentrations



Process Imaging

BY PROCESS IMAGING LTD

FEATURES

- Air purged stainless steel enclosure for ATEX Zone I certification
- Rugged flow cell rated for high pressure and harsh environments
- Compact form can be installed close to the sample point or used as a portable process optimization tool
- Integrated control software capable of complex particle analysis

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DATA SHEET

GENERAL

Type	Droplet & Particle Analyzer	
Manufacturer	Process Imaging Limited	
Model	MExIA	
Sample temp limits	0 – 120°C (32 – 248° F)	
Max operating pressure	120 Bar (1740 PSI)	
System description	Portable ATEX certified analyzer unit	
Instrument fittings	Swagelok SS316	

INSTRUMENT CHARACTERISTICS

Accuracy	±2% Full Scale	
Repeatability	±1.5%	
Linearity	±7.5% in range 0 – 400PPM	
Drop size range	1.2 – 150 microns	
Particle size range	1.2 – 150 microns	
Concentration	0 – 2500 ppmV	
Data outputs	Serial data by Modbus TCP/IP for all data and alarms if necessary	
Flow rates	Flow through analyzer	Up to 4 litres/min

PHYSICAL CHARACTERISTICS

Sample feed	Typically ½" sample tubing/flexible hose	
Analyzer drain	Typically ½" sample tubing/flexible hose	
Purge air connection	Typically ½" sample tubing/flexible hose	
Mounting	Analyzer	Analyzer field enclosure
	Control computer	Within analyzer enclosure
Weights (dry)	Analyzer field cabinet	30 kgs
Materials	Analyzer wetted	316SS, Viton, industrial sapphire
	Analyzer field cabinet	316 SS
Enclosure rating	Analyzer	IP55
Hazardous area	Zone I	
Classifications	Ex II 2 G Ex px IIC T3	
Environment	Analyzer enclosure	-20 °C – 55 °C ambient

ELECTRICAL DATA

Supply voltage	240V 50 Hz OR 110V 60 Hz	
Consumption	100 Watts (peak)	

SUPPLY REQUIREMENTS

Purge	Clean dry air, 155 litres per minute @ 4 – 7 bar
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#1 Worldwide
for process and environmental
oil in water monitors