ASPROC
Advanced Solutions for Process Controls

ASPROC

OIL IN WATER ANALYSERS
SOLIDS IN WATER ANALYSERS
PARTICLE SIZE ANALYSERS

+39 055 9705134 info@asproc.net www.asproc.net

Process Imaging MEx1A

Process Imaging MEx1A Zone 1 Certified Combined Analyser and Computer

This compact all in one unit combines the analyser and control computer into a single air purged enclosure with ATEX Zone 1 certification. The unit weighs 35Kgs and its compact nature and small footprint makes it easy to transport with minimal set-up time out of the box for generating data quickly.

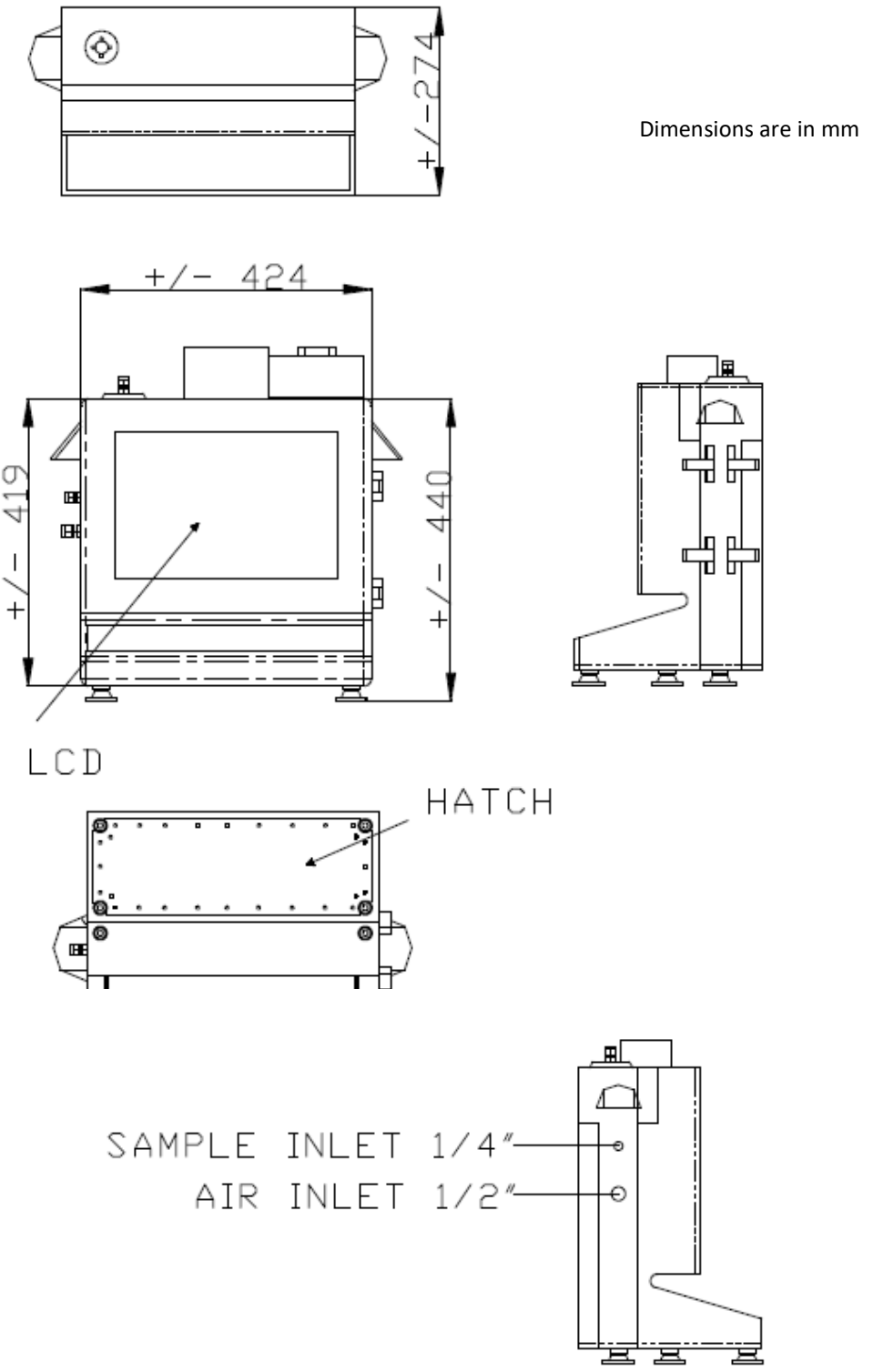
Its stainless steel construction and flow cell rated for continuous use at 120 Bar (1740 PSI/12000 kPa) with the capability to operate with process liquid temperatures of up to 120°C (248°F) make the analyser ideal for use in harsh environments. Options for higher temperatures and pressures are available on request.

The compact nature of the analyser enclosure allows installation very close to the sample point to ensure the best possible sampling is achieved and the ability to work with flow velocities of up to $5ms^{-1}$ ensure great response to process changes and minimal flow control requirements. There is no upstream sample conditioning required.

It is supplied with fully featured control software capable of complex particle analysis and has an easily accessible USB port for transferring data from the analyser when required.

Available for either 230V 50Hz or 110V 60Hz power supplies, the MEx1A uses instrument air to achieve the hazardous area rating. For operation in tropical and desert locations the MEx1A can be supplied with a thermostatically controlled cooler that uses the same instrument air supply to maintain a constant temperature within the enclosure regardless of how hot the working environment is.

The analyser can be supplied with a range of accessories including sampling hoses suitable for a range of sample pressures, hazardous area transformers to enable operation from alternative voltages and flight cases for easy transportation of this robust investigative tool.



Process Imaging MEx1A General Arrangement Drawing

General				
1.01	Type	Droplet & Particle Analyser		
1.02	Manufacturer	Process Imaging Limited		
1.03	Model	MEx1A		
1.04	Sample Temp Limits	0 – 120°C (32 – 248˚F)		
1.05	Max Operating Pressure	120 Bar (1740 PSI)		
1.06	System Description	Portable ATEX certified analyser unit		1
1.07	Tag Number	TBC		
1.08	Instrument Fittings	Swagelok SS316		2
Instrument Characteristics				
2.01	Accuracy	±2% Full Scale		
2.02	Repeatability	±1.5%		
2.03	Linearity	±7.5% in range 0 – 400PPM		
2.04	Drop Size Range	1.2 – 150 microns		
2.05	Particle Size Range	1.2 – 150 microns		
2.06	Concentration	0 – 2500 ppmV		
2.07	Data Outputs	Data displayed on control computer screen or can provide Serial data by Modbus TCP/IP for all data and alarms if necessary		3
2.08	Flow Rates	Flow through analyser	Up to 4 litres/min	
Physical Characteristics				
3.01	Sample Feed	Typically ½” sample tubing/flexible hose		
3.02	Analyser Drain	Typically ½” sample tubing/flexible hose		
3.03	Wash Connection	N/A		
3.04	Purge Air Connection	Typically ½” sample tubing/flexible hose		
3.05	Mounting	Analyser	Analyser Field Enclosure	
		Control Computer	Within analyser enclosure	
3.06	Weights (dry)	Analyser Field Cabinet	30 Kgs	
3.07	Materials	Analyser Wetted	316SS, Viton, Industrial Sapphire	2
		Analyser Field Cabinet	316 SS	
3.08	Enclosure Rating	Analyser	IP55	
3.09	Hazardous Area	Zone 1		1
3.10	Classifications	Ex II 2 G Ex px IIC T3		1
3.11	Cable Gland	Peppers or Hawke Brass M20		
3.12	Environment	Analyser Enclosure	-20 – 55°C Ambient	
Electrical Data				
4.01	Supply Voltage	Analyser Field Cabinet	240V 50 Hz OR 110V 60 Hz	4
4.02	Consumption	Analyser Field Cabinet	100 Watts (Peak)	
Supply Requirements				
5.01	Purge	Clean dry air, 155 litres per minute @ 4 – 7 bar		
Notes				
1	Certification by MDoC from ORGA BV in accordance with ATEX for Zone 1			
2	Wetted materials to meet fluid specifications			
3	Further data can be accessed by transfer to USB memory device.			
4	Power supply is single voltage and must be specified at the time of order			