Technical Specifications

Gas Flow Rate	1 to 5 NI/min (2.2 to 10.6 scfh)	
Operating Pressure	10 barg (145 psig) (with a high pressure option to 200 barg (2900 psig) available)	
Particulate Filter	99.5% removal of 0.3µm	
Sample Tube	Supplied with 0.5m vent tube, to prevent back-diffusion	
Vacuum Rating	Standard push fittings are not vacuum-rated	
Materials of Construction	Block & cap: Flow control block: Couplings:	316 stainless steel aluminum nickel-plated brass
Sensor Port	5/8" UNF to support all Michell Instruments' impedance sensors / transmitters	
Environmental	IP66 (NEMA 4)	
Operating Temperature	-40 to +60°C (-40 to +140°F) (or as determined by sensor specification)	
Storage Temperature	-40 to +70°C (-40 to +158°F) 0-95% RH non-condensing	
Weight	1.1kg (2.42lb) (1.3kg (2.9lb) when Easidew sensor fitted)	

Customer Service Contact Details

If, after reading this manual, there are any questions about the product or how to install and operate it, please contact a Michell representative.

Refer to www.michell.com for details of Michell Instruments' worldwide offices contact information.



Easidew Sampler (LP) Self-Contained Sampling System User's Manual



97076 Issue 08 May 2013 The Easidew Sampler is a modular low-cost, self-contained, filtration block and flow control arrangement which is suitable for any Michell impedance dew-point transmitter with 5/8" - 18 UNF process connection size, and is able to perform dew-point measurements at atmospheric (1 barg (14.5 psig)) or system pressures (10 barg (145 psig)).

Connection Ports

The INLET and OUTLET port connections are push-fit types to accept PTFE (or similar) 6mm O/D tube.

A 0.5 metre length of PTFE is supplied which should be used as a venting mechanism from the OUTLET port, whether measuring in either the pressure or atmospheric mode.

Filter

A 99.5% 0.3 µm particulate filter cartridge is fitted as standard and is accessed via the filter cap. The condition of the filter should be checked at regular intervals to ensure optimum performance. To inspect or change the contaminated filter, remove the filter cap using the hexagonal nut (A/F=19mm). Replacement cartridges can be ordered from Michell Instruments (Part No. SSF-PF-10PK). The filter cap is sealed with an O-ring seated in the main body of the block. **NOTE: When inspecting or changing the filter, ensure the O-ring is correctly seated when re-tightening the filter cap.**

Flow Control Valve

A flow control valve is supplied factory-fitted to the OUTLET port. This valve is designed to set the optimum gas flow of between 1 to 5 NI/min (2.2 to 10.6 scfh) through the block.

NOTE: The flow control valve should not be used as a flow shut-off valve.

System Pressure Dew-Point Measurements

The Easidew Sampler system is factory-assembled to make pressure dew-point measurements. This is achieved by controlling the gas flow at the OUTLET port. The maximum operating pressure for the Easidew Sampler system is 10 barg (145 psig).

Atmospheric Pressure Dew-Point Measurements

If required, the block can be easily reconfigured to make atmospheric dew-point measurements by installing the flow control valve in the INLET port. Simply swap positions of the flow control valve and the gas pipe connection coupling fitted at the inlet port. When reconfiguring the Easidew Sampler ensure that the system is leak tight before commencing measurements.

Mounting

The mounting of the Easidew Sampler system is not position critical. A mounting bracket is factory-fitted. This bracket is easily removed and repositioned to provide a number of mounting options.

Alternatively it is possible to mount the Easidew Sampler system without the bracket by using the 2, M6 x 5mm deep mounting fixings, pitch at 20mm, which are machined directly into the block.



Ambient pressure: 1 barg (14.5 psig)
Dew-Point Measurements
(Transmitter shown for
illustration purpose only)



System pressure: 10 barg (145 psig)
Dew-Point Measurements
(Transmitter shown for
illustration purpose only)



Maximum operating pressure 10 barg (145 psig)
It is important that the gas fittings are
correctly tightened before use.
Failure to do so will affect the pressure rating.

For use at higher pressures please contact
Michell Instruments for details.



Liquid Contamination

The Easidew Sampler does not provide protection from liquid contamination. If there is a possibility of liquid in the gas sample, additional filtration should be fitted before the Easidew Sampler.