Easidew I.S.

Dew-Point Transmitter (For Hazardous Area Applications)

The Easidew I.S. (intrinsically safe) transmitter is a dew-point transmitter designed and certified for use in hazardous area applications (flammable or explosive gases) in all regions with certification from: IECEx, CSA, FM and ATEX.

The Easidew I.S. is available with a 5/8" UNF process connection or alternatively with a G1/2" BSP or 3/4" UNF process connection. It is designed for ease of use, incorporating all of the features needed to make installation and operation into your air or gas management system as simple as possible.

Michell's Advanced Ceramic Moisture Sensor technology based transmitter is calibrated to international standards and is delivered with a traceable calibration certificate.



Highlights

- IECEx, CSA, FM, ATEX certified transmitter for use in hazardous areas
- 5/8" UNF, G1/2" BSP or 3/4" UNF process connection
- Dew-point or ppm, moisture content
- 2-wire loop powered connection
- Rugged 316 stainless steel IP66 construction
- Measurement range –100 to +20°C
- Accuracy ±2°Cdp
- Calibration Certificate (NPL, NIST)

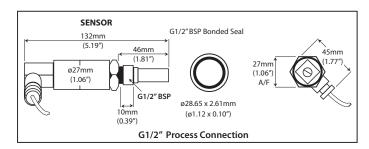
Applications

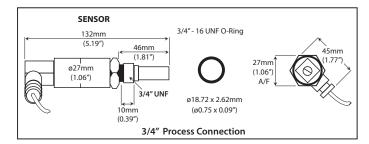
- · Moisture in Liquids
- Compressed air
- Medical Gas
- CNG Stations
- Trace Moisture

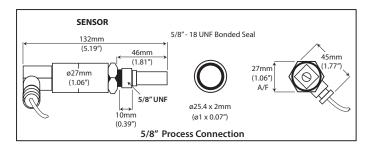


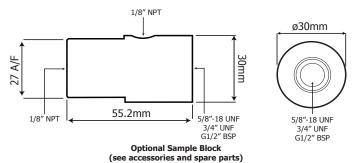
Easidew I.S.

Dimensions









Electrical Connections

4-20 mA connections 2-wire			
Pin 1	4-20 mA		
Pin 3	POWER		

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Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice.

Issue No: Easidew IS_97168_V8.1_UK_0120

Technical Specifications

Performance					
Measurement range	−100 to +20°C dew point −110 to +20°C dew point				
Accuracy	±2°C dew point				
Response time	5 mins to T95 (dry to wet)				
Repeatability	0.5°C dew point				
Calibration	Traceable 7-point calibration certificate				
Electrical Specifications					
Output signal	4–20 mA (2-wire connection, current source) User configurable over range				
Output	Dew point or moisture content for ppm_{V}				
Analog output scaled range	Dew point: -100 to +20°C Moisture content in gas: 0-3000 ppm _v Non-standard available upon request				
Supply voltage	12 to 28 V DC				
Load resistance	Max 250 Ω @ 12 V (500 Ω @ 24 V)				
Current consumption	20 mA max				
CE marked	Certified				
Operating Specifications					
Operating temperature	-40 to +60°C				

Operating Specifications				
Operating temperature	-40 to +60°C			
Compensated Temperature Range:	-20 to +50°C NOTE: The transmitter accuracy statement is only valid for the temperature range: -20/+50°C			
Storage Temperature	-40 to +60°C			
Operating pressure	45 MPa (450 barg) maximum			
Overpressure rating	x2 operating pressure 90 MPa (900 barg)			
Flow rate	1 to 5 NI/min mounted in standard sampling block: 0 to 10m/sec direct insertion			

Overpressure rating	x2 operating pressure 90 MPa (900 barg)				
Flow rate	1 to 5 NI/min mounted in standard sampling block; 0 to 10m/sec direct insertion				
Mechanical Specifications					
Ingress protection	IP66 in accordance with standard BS EN 60529:1992, NEMA 4 in protection accordance with standard NEMA 250–2003				
Hazardous area certificates *	rdous area certificates * ATEX: II 1 G Ex ia IIC T4 Ga (-20°C to +70° IECEx: Ex ia IIC T4 Ga (-20°C to +70°C) TC TR: 0Ex ia IIC T4 Ga (-20°C to +70°C) FM: Class I, Division 1, Groups A B C D, T4 cCSAus: Class I, Division 1, Groups A B C D,				
Housing material	316 stainless steel				
Dimensions	L=132mm x ø45mm (with connector)				
Filter (sensor protection)	Standard: HDPE Guard <10µm Optional: 316 stainless steel sintered guard <80µm				
Process connection and material	5/8"- 18 UNF Alternatives: G1/2" BSP or 3/4"- 16 UNF 316 stainless steel				
Weight	150g				
Interchangeability	Fully interchangeable transmitter				
Electrical connections	Hirschmann GDS series (DIN 4350-C)				
Diagnostic conditions (factory programmed)	Condition Sensor fault Under-range dew point Over-range dew point	Output 23 mA 4 mA 20 mA			
Approved galvanic isolators	KFD2-CR-EX1.20200 KFD2-CR-EX1.30200 KFD0-CS-EX1.50P	KFD0-CS-EX2.50P KFD2-STC4-EX1.H MTL5041, MTL5040			

^{*} The end user has a responsibility to ensure that when installed in the Hazardous Area, the system is compliant with relevant local and international installation Standards for the use of equipment in explosive atmospheres.

