

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, QPS, ATEX and UKCA.

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 Ceramic Metal-Oxide Moisture Sensor technology-based transmitter is calibrated to international standards and is delivered with a traceable calibration certificate.



Highlights

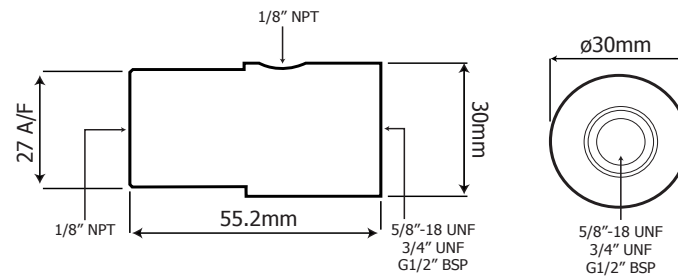
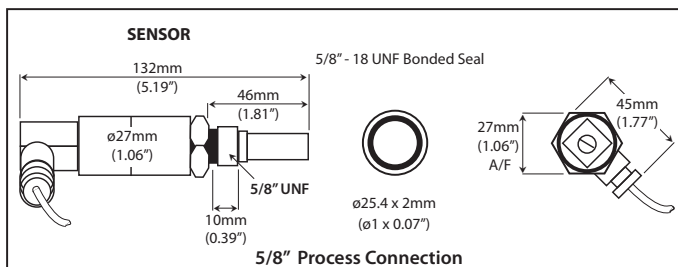
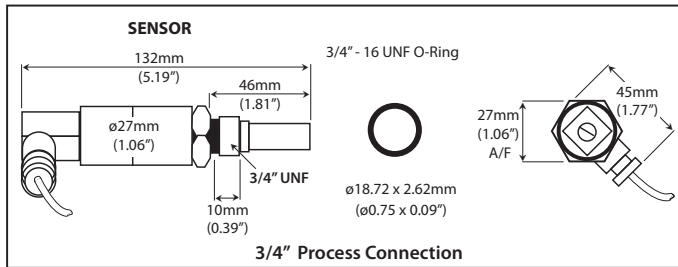
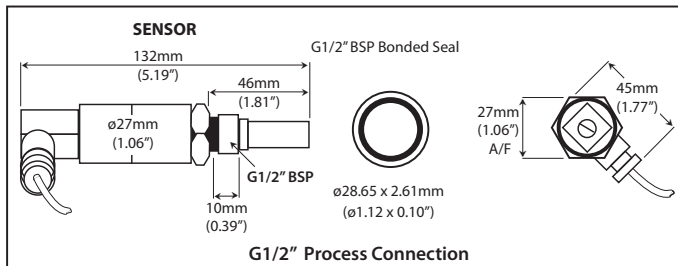
- IECEx, QPS, ATEX, UKCA certified transmitter for use in hazardous areas
- 5/8" UNF, G1/2" BSP or 3/4" UNF process connection
- Dew-point or ppm_v moisture content
- 2-wire loop powered connection
- Rugged 316 stainless steel IP66 construction
- Measurement range -100...+20 °C (-148...+68 °F)
- Accuracy ±2 °Cdp (±3.6 °Fdp)
- Calibration Certificate (NPL, NIST)

Applications

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

Easidew I.S.

Dimensions



Optional Sample Block
(see accessories and spare parts)

Electrical Connections

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

Technical Specifications

Performance		
Measurement range	-100...+20 °C (-148...+68 °F) dew point -110...+20 °C (-166...+68 °F) dew point	
Accuracy	±2 °C (±3.6 °F) dew point	
Response time	5 mins to T95 (dry to wet)	
Repeatability	0.5 °C (0.9 °F) 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...+20 °C (-148...+68 °F) Moisture content in gas: 0...3000 ppm _v Non-standard available upon request	
Supply voltage	12...28 V DC	
Load resistance	Max 250 Ω @ 12 V (500 Ω @ 24 V)	
Current consumption	20 mA max	
Compliances	CE & UKCA	
Operating Specifications		
Operating temperature	-40...+60 °C (-40...+140 °F)	
Compensated Temperature Range	-20...+50 °C (-4...+122 °F) NOTE: The transmitter accuracy statement is only valid for the temperature range: -20/+50 °C	
Storage Temperature	-40...+60 °C (-40...+140 °F)	
Operating pressure	52.5 MPa (525 barg/7614 psig) maximum	
Overpressure rating	x2 operating pressure 90 MPa (900 barg/13053 psig)	
Flow rate	1...5 NI/min mounted in standard sampling block; 0...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 *	ATEX/UKCA: II 1 G Ex ia IIC T4 Ga (-20 °C...+70 °C) IECEx: Ex ia IIC T4 Ga (-20 °C...+70 °C) TR CU: 0Ex ia IIC T4 Ga (-20 °C...+70 °C) cQPSus: IS, Class I, Division 1, Groups A, B, C & D, T4; Class I, Zone 0, AEx ia IIC T4 Ga, Ex ia IIC T4 Ga; Tamb +70°C	
Housing material	316 stainless steel	
Dimensions	L=132 mm x 45 mm (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	150 g (5.29 oz)	
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	KFD0-CS-EX1.50P KFD0-CS-EX2.50P KFD2-STC4-EX1.H	

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice.
Issue No: Easidew IS_97168_V8.6_EN_0424

* 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.