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

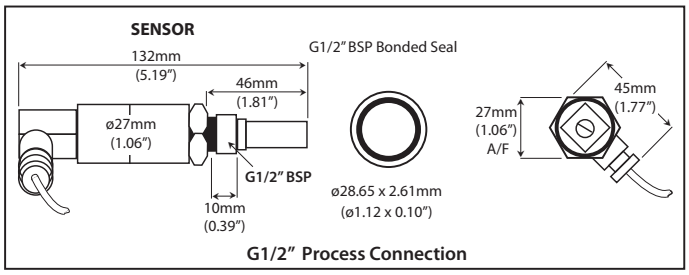
- IECEx, QPS, ATEX, UKCA certified transmitter for use in hazardous areas
- 5/8" UNF, G1/2" BSP or 3/4" UNF process connection
- Dew-point or ppm_V moisture content
- 2-wire loop powered connection
- Rugged 316 stainless steel IP66 construction
- Measurement range -100...+20 °C (-148...+68 °F)
- Accuracy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

Applications

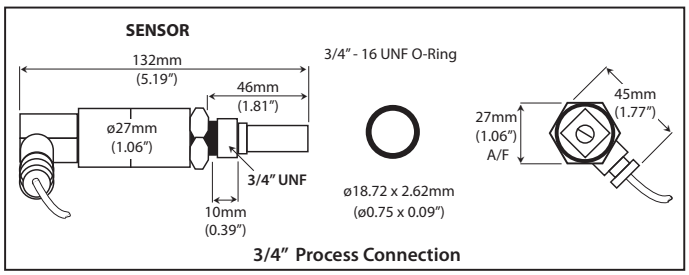
- Moisture in Liquids
- Compressed air
- Medical Gas
- CNG Stations
- Trace Moisture

Easidew I.S.

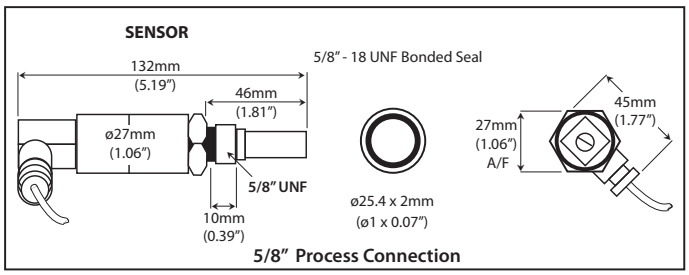
Dimensions



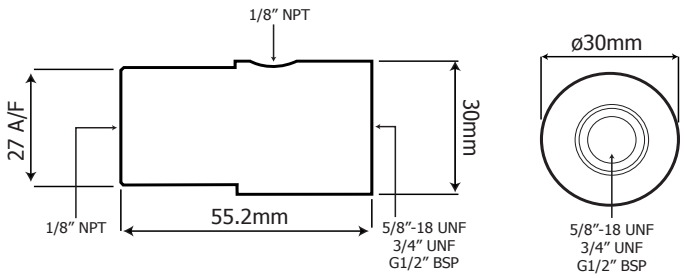
G1/2" Process Connection



3/4" Process Connection



5/8" Process Connection



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
CE & UKCA conformity	Approved

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	45 MPa (450 barg/6526 psig) maximum
Overpressure rating	x2 operating pressure 90 MPa (900 barg/13053 psig)
Flow rate	1...5 Nl/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 Gb, Ex ia IIC T4 Gb; Tamb +70°C
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	150 g (5.29 oz)
Interchangeability	Fully interchangeable transmitter
Electrical connections	Hirschmann GDS series (DIN 4350-C)
Diagnostic conditions (factory programmed)	**Condition** / **Output** Sensor fault / 23 mA Under-range dew point / 4 mA Over-range dew point / 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.*

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