

# 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

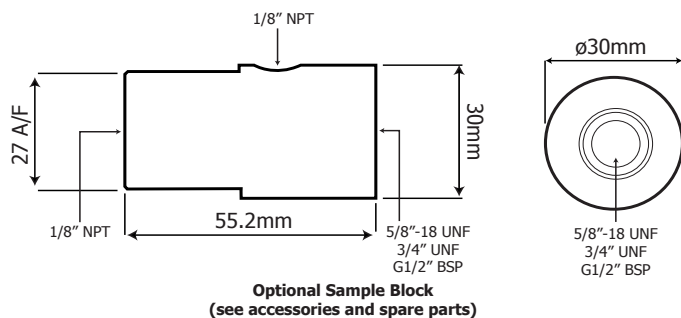
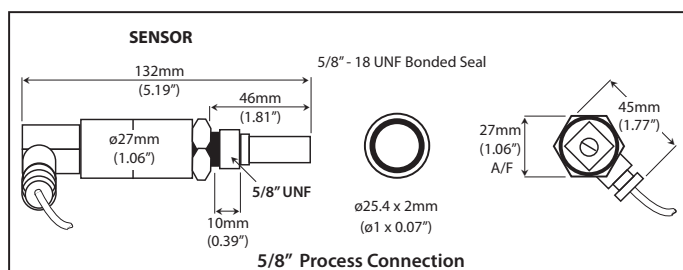
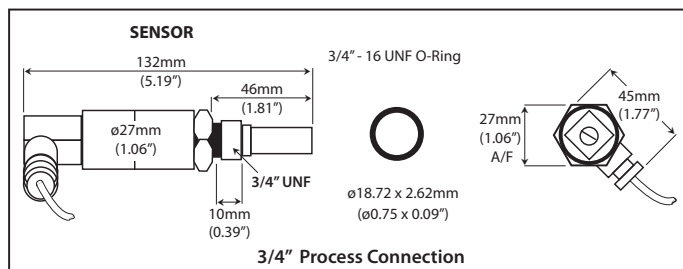
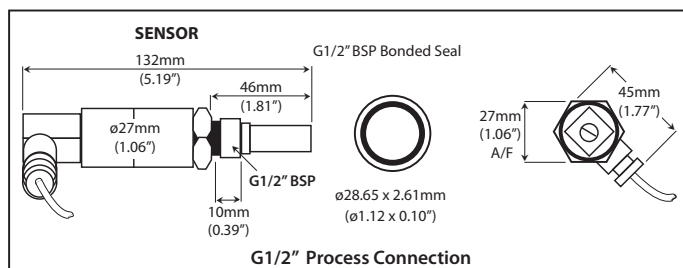
- IECEx, QPS, ATEX, UKCA certified transmitter for use in hazardous areas
- 5/8" UNF, G1/2" BSP or 3/4" UNF process connection
- Dew-point or ppm<sub>v</sub> moisture content
- 2-wire loop powered connection
- Rugged 316 stainless steel IP66 construction
- Measurement range -100...+20 °C
- Accuracy ±2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

### Applications

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

## Technical Specifications

### 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\_V8.3\_UK\_0921

Performance	
<b>Measurement range</b>	-100...+20 °C dew point -110...+20 °C dew point
<b>Accuracy</b>	±2 °C dew point
<b>Response time</b>	5 mins to T95 (dry to wet)
<b>Repeatability</b>	0.5 °C dew point
<b>Calibration</b>	Traceable 7-point calibration certificate
Electrical Specifications	
<b>Output signal</b>	4...20 mA (2-wire connection, current source) User configurable over range
<b>Output</b>	Dew point or moisture content for ppm <sub>v</sub>
<b>Analog output scaled range</b>	Dew point: -100...+20 °C Moisture content in gas: 0...3000 ppm <sub>v</sub> Non-standard available upon request
<b>Supply voltage</b>	12...28 V DC
<b>Load resistance</b>	Max 250 Ω @ 12 V (500 Ω @ 24 V)
<b>Current consumption</b>	20 mA max
<b>CE &amp; UKCA conformity</b>	Approved
Operating Specifications	
<b>Operating temperature</b>	-40...+60 °C
<b>Compensated Temperature Range:</b>	-20...+50 °C NOTE: The transmitter accuracy statement is only valid for the temperature range: -20/+50 °C
<b>Storage Temperature</b>	-40...+60 °C
<b>Operating pressure</b>	45 MPa (450 barg) maximum
<b>Overpressure rating</b>	x2 operating pressure 90 MPa (900 barg)
<b>Flow rate</b>	1...5 NI/min mounted in standard sampling block; 0...10m/sec direct insertion
Mechanical Specifications	
<b>Ingress protection</b>	IP66 in accordance with standard BS EN 60529:1992, NEMA 4 in protection accordance with standard NEMA 250-2003
<b>Hazardous area certificates *</b>	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
<b>Housing material</b>	316 stainless steel
<b>Dimensions</b>	L=132mm x 45mm (with connector)
<b>Filter (sensor protection)</b>	Standard: HDPE Guard <10µm Optional: 316 stainless steel sintered guard <80µm
<b>Process connection and material</b>	5/8"- 18 UNF Alternatives: G1/2" BSP or 3/4"- 16 UNF 316 stainless steel
<b>Weight</b>	150 g
<b>Interchangeability</b>	Fully interchangeable transmitter
<b>Electrical connections</b>	Hirschmann GDS series (DIN 4350-C)
<b>Diagnostic conditions (factory programmed)</b>	<b>Condition</b> Sensor fault Under-range dew point Over-range dew point <b>Output</b> 23 mA 4 mA 20 mA
<b>Approved galvanic isolators</b>	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.