

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.



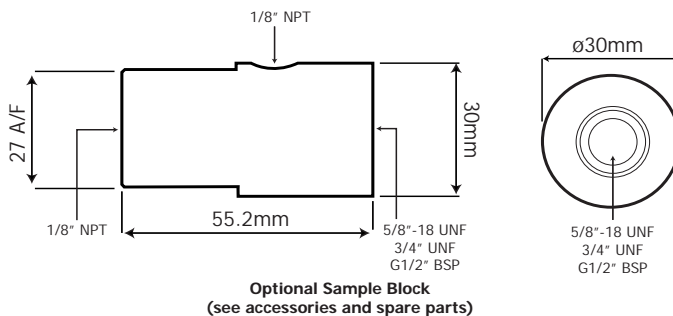
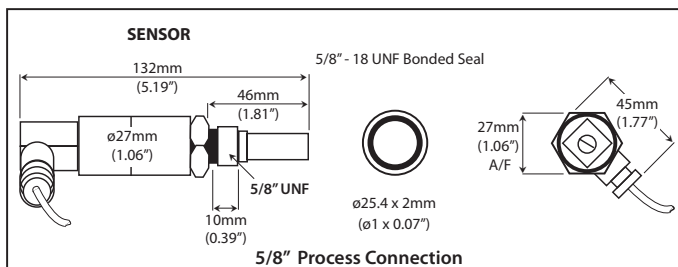
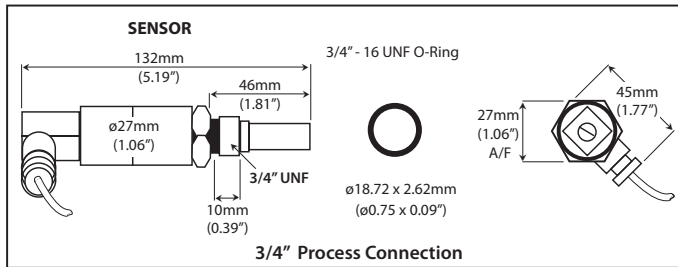
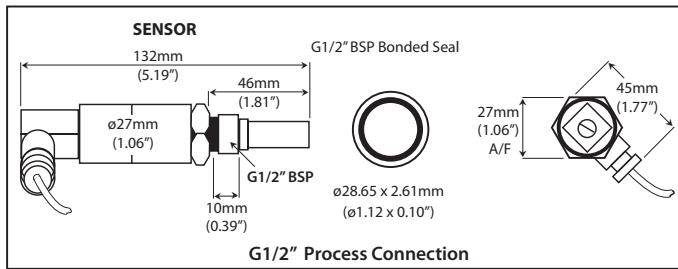
Highlights

- 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_v 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

Dimensions



Electrical Connections

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

Michell Instruments 48 Lancaster Way Business Park, Ely,
 Cambridgeshire, CB6 3NW
 Tel: +44 (0) 1353 658000, Fax: +44 (0) 1353 658199,
 Email: info@michell.com, Web: www.michell.com/uk

Please note: Michell Instruments adopts a continuous development program which
 sometimes necessitates specification changes without notice.
 Issue No: Easidew IS_97168_V8_UK_1117

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								
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								
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: II 1 G Ex ia IIC T4 Ga (-20°C to +70°C) 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, T4								
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)	<table border="1"> <thead> <tr> <th>Condition</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td>Sensor fault</td> <td>23 mA</td> </tr> <tr> <td>Under-range dew point</td> <td>4 mA</td> </tr> <tr> <td>Over-range dew point</td> <td>20 mA</td> </tr> </tbody> </table>	Condition	Output	Sensor fault	23 mA	Under-range dew point	4 mA	Over-range dew point	20 mA
Condition	Output								
Sensor fault	23 mA								
Under-range dew point	4 mA								
Over-range dew point	20 mA								
Approved galvanic isolators	<table border="1"> <tbody> <tr> <td>KFD2-CR-EX1.20200</td> <td>KFD0-CS-EX2.50P</td> </tr> <tr> <td>KFD2-CR-EX1.30200</td> <td>KFD2-STC4-EX1.H</td> </tr> <tr> <td>KFD0-CS-EX1.50P</td> <td>MTL5041</td> </tr> <tr> <td></td> <td>MTL5040</td> </tr> </tbody> </table>	KFD2-CR-EX1.20200	KFD0-CS-EX2.50P	KFD2-CR-EX1.30200	KFD2-STC4-EX1.H	KFD0-CS-EX1.50P	MTL5041		MTL5040
KFD2-CR-EX1.20200	KFD0-CS-EX2.50P								
KFD2-CR-EX1.30200	KFD2-STC4-EX1.H								
KFD0-CS-EX1.50P	MTL5041								
	MTL5040								