

# Easidew 34

## Dew-Point Transmitter



The Easidew is a dew-point transmitter with a 3/4" 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

- 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 -110 to + 20°Cdp or -100 to +20°Cdp as standard
- Accuracy ±2°Cdp
- Calibration Certificate (NPL, NIST)

### Technical Specifications

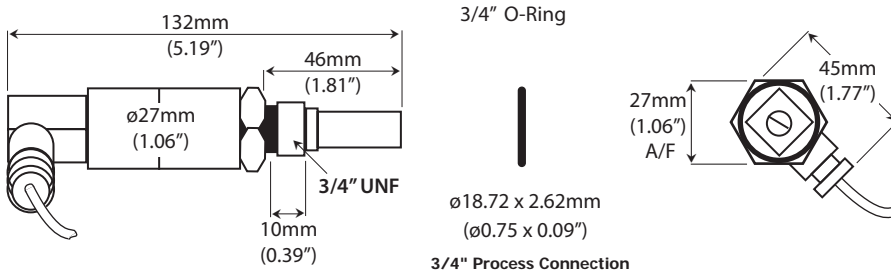
| Performance                                |                                                                                                                     |        |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------|
| Measurement range                          | -100 to +20°C dew point<br>-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 13 point calibration                                                                                      |        |
| Electrical Specifications                  |                                                                                                                     |        |
| Output signal                              | 4-20 mA (2-wire connection, current source)<br>User configurable over range                                         |        |
| Output                                     | Dew point or moisture content for ppm <sub>v</sub>                                                                  |        |
| Analog output scaled range                 | Dew point: -100 to +20°C<br>Moisture content in gas: 0-3000 ppm <sub>v</sub><br>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 pressure                         | 45 MPa (450 barg) maximum                                                                                           |        |
| Overpressure rating                        | x2 operating pressure 90 MPa (900 barg)                                                                             |        |
| Flow rate                                  | 1 to 5 Nl/min mounted in standard sampling block;<br>0 to 10m/sec direct insertion                                  |        |
| Temperature coefficient                    | Temperature compensated across operating temperature range                                                          |        |
| Mechanical Specifications                  |                                                                                                                     |        |
| Ingress protection                         | IP66 in accordance with standard BS EN 60529:1992,<br>NEMA 4 in protection accordance with standard NEMA 250-2003   |        |
| Housing material                           | 316 stainless steel                                                                                                 |        |
| Dimensions                                 | L=132mm x ø45mm (with connector)                                                                                    |        |
| Filter (sensor protection)                 | Standard: HDPE Guard <10µm<br>Optional: 316 stainless steel sintered guard <80µm                                    |        |
| Process connection and material            | 3/4" - 16 UNF<br>316 stainless steel                                                                                |        |
| Weight                                     | 150g                                                                                                                |        |
| 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  |

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## Dimensions



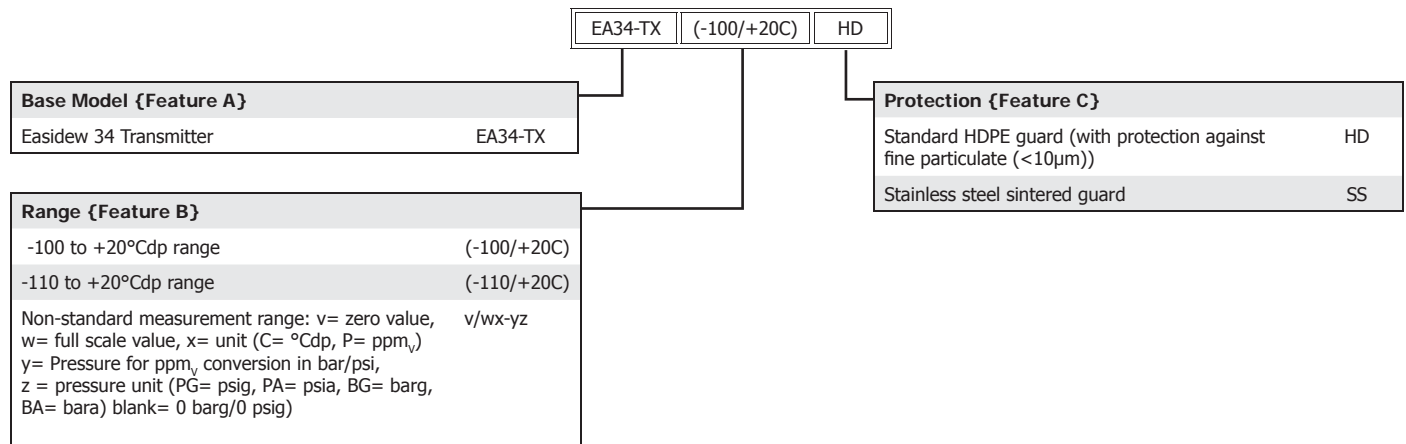
## Electrical Connections

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

## Ordering Codes

To construct the order code, select the relevant feature from the tables below, starting with the base model, which is {Feature A} and then add on options to create a string: {Feature A} + {Feature B} + {Feature C}

**Order example:** EA34-TX + (-100/+20C) + HD  
 Easidew 34 Transmitter, 2-wire, 4-20 mA output, measurement range -100 to +20°Cdp, HDPE guard



## Accessories and Spare Parts

|                          |                                                                                          | Process Connection Size |
|--------------------------|------------------------------------------------------------------------------------------|-------------------------|
|                          |                                                                                          | 3/4"                    |
| <b>Sensor Protectors</b> | Pack of 10 replacement HDPE guards for protection against fine particulate <10µm         | EA2-HDPE                |
|                          | Stainless steel sintered guard replacement for protection against fine particulate <80µm | S5G                     |
| <b>Other Parts</b>       | Sensor cable – 0.8m with mini-DIN mating socket (for NON I.S. sensors)                   | EA2-CAB-08              |
|                          | Sensor cable - total length (if more than the standard 0.8m is required)                 | EA2-CAB-xx              |
|                          | Additional/replacement transmitter labels (per 2 labels)                                 | GEN-LABEL               |
|                          | O-rings/Bonded seals for process connection – pack of 5                                  | 3/4-OR                  |
|                          | Easidew communications kit for EA34                                                      | EA2-CK                  |