The DewPro MMY31 measures dew point or ppmv in gases. It is a cost-effective, loop-powered dew point transmitter designed for “in-line” installation where trace moisture measurement is required. The planar aluminum oxide sensor provides excellent corrosion resistance, longer calibration stability, quick response times, and an exceptionally low temperature coefficient.

The DewPro MMY31 mounts directly in-line in your process gas, where a bypass installation is not appropriate. It is easily installed via a variety of adjustable insertion length compression fittings. The optional integrated display with user interface provides full programming and diagnostic capability.

Applications include glove boxes, environmental chambers, test chambers, and other locations where direct insertion is required.

**Features**
- Loop-powered, 4 to 20 mA transmitter
- Fast response planar aluminum oxide sensor
- Trouble-free indoor or outdoor mounting
- Field validation with the MMY245 moisture analyzer
- Microcontroller electronics in Type 4X/IP67 enclosure

**Options**
- Integrated display with user interface
- FM approved intrinsically safe/explosion-proof, Class I,II,III, Division 1 and 2, Groups A,B,C,D,E,F&G hazardous (classified) locations
- English or metric fittings
- External display available with loop-power supply and alarm contacts
DewPro MMY31 specifications

Sensing element
Planar aluminum oxide sensor

Measurement range
-130°F to 50°F (-90°C to 10°C) dew point temperature; 0 to 10 ppmv, 0 to 1000 ppmv (fully adjustable with integral display)

Recommended recalibration cycle
12 months, depending on the application

Calibration accuracy
±3.6°F (±2°C) dew point at 77°F (25°C)

Maximum sensor relative humidity
50% at dew point temperatures >32°F (>0°C)

Operating temperature range
Process: -40°F to 122°F (-40°C to 50°C)
Electronics: -40°F to 185°F (-40°C to 85°C)

Element filter
100 micron, sintered stainless steel

Standard operating pressure
0 to 1750 psig (0 to 120 bar, 12 MPa)

Helium leak-rate
<10–6 mbar/s

Output
4 to 20 mA loop-powered, 16 μA resolution

Electronics
Microcontroller operated

Optional display
Four-digit numeric display with bar graph and matrix position indication; four user interface keys for unit selections, output adjustments and ranging

Power supply
24 VDC nominal, 12 to 30 VDC

Protection
Type 4X/IP67

Weight
3.3 lb (1.5 kg)

Probe tube
316 stainless steel, 1/2 in. (12.7 mm) diameter, insertion length 2 in. (50 mm) to 3.5 in. (90 mm)

Typical probe mounting

European compliance

Optional certifications/approvals
- FM IS Class I,II,III, Division 1, Groups A,B,C,D,E,F&G, T5
- FM XP-IS Class I, Division 1, Groups A,B,C&D, T5
- FM NI Class I, Division 2, Groups A,B,C&D, T4A DIP Class II,III, Division 1, Groups E,F&G, T5
- ATEX II 3G Ex nA IIC T4
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With a reach that extends across the globe, Panametrics’ critical measurement solutions and flare emissions management are enabling customers to drive efficiency and achieve carbon reduction targets across critical industries including: Oil & Gas; Energy; Healthcare; Water and Wastewater; Chemical Processing; Food & Beverage and many others.

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