## DewPro® MMY 31

The DewPro® MMY 31 measures dew point or ppm<sub>v</sub> in dry gases. It is a cost-effective, loop-powered dew point transmitter designed for "in-line" installation where a trace moisture measurement is required, but display, alarms, and other features are not needed. The planar capacitive aluminum oxide sensor provides excellent corrosion resistance, longer calibration stability, quick response times, and an exceptionally low temperature coefficient.

The MMY 31 mounts directly in-line for applications such as glove boxes, where a bypass is not appropriate. It is easily installed via a 1/2" MNPT or G 1/2 adjustable insertion length compression fitting. Applications include glove boxes, environmental chambers, and high altitude testing.

## **Features:**

- Simple, 4 20 mA two-wire connection
- Fast response planar sensor
- Trouble-free indoor or outdoor mounting
- Field calibration with the optional **MMY245**
- Microprocessor in NEMA 4X (IP66) enclosure
- FM approved (Class 1) Division 2 standard

## **Options:**

- English or Metric fittings
- FM approved Class 1, Division 1
- On-board display and user interface
- External displays available with loop-power supplies and/or alarm contacts

4.44 [112.8] 3.39 [86.1] 4.04 [102.6] IP66 EPOXY COATED CAST ALUM. HOUSING THAT MEETS NEMA 4X REQUIREMENTS [41.1] 1.62 AMBIENT TEMP. = -40° F TO +140° F 1/2" MNPT COMPRESSION FITTING 10.4 [264.2] 4.74 [120.4]] .50 [12.70]

Ordering Information: See page 10

## **Dimensions/Specifications**

Sensing Element: Planar sensor, aluminum oxide

capacitance principle

-90 °C to +10°C (-130°F to +50°F) Measurement Range:

dew point temperature; 0 to 10, 0 to 1000 ppm<sub>v</sub> (fully adjustable with

integral display)

Recommended

12 months, depending on application Recalibration Cycle:

 $\pm 2^{\circ}$ C (3.6°F) dew point over the Calibration Accuracy:

entire range

Repeatability:  $\pm 1^{\circ}C (\pm 1.8^{\circ}F)$ 

Maximum Sensor

Relative Humidity: 50% at dew point temperatures

> 0°C (32°F)

Temperature

Coefficient:  $\Delta Td/\Delta T < 0.2^{\circ}C/^{\circ}C (<0.2^{\circ}F/^{\circ}F)$ 

Operating

 $-40^{\circ}$ C to  $+60^{\circ}$ C ( $-40^{\circ}$ F to  $+140^{\circ}$ F) Temperature:

Storage

Temperature:

 $-40^{\circ}$ C to + 60°C (-40°F to + 140°F)

0 - 1750 psig (0 - 120 bar)

Sintered Filter: 100 micron

**Standard Operating** 

Pressure:

 $< 10^{-6} \, \text{mbar l/s}$ Helium Leak-rate:

Output: 4 to 20 mA, 16 uA resolution **Electronics:** Microprocessor-controlled

Power supply: 24 V DC nominal, 12 to 32 V DC

tolerance

Protection: NEMA 4X (1P67)

Weight: 3.2 lbs (1.5 kg)

Probe Tube: 316 stainless steel, 1/2" (12.7 mm)

diameter, insertion length 2" (50 mm)

to 3.5" (90 mm)

Typical Probe

1/2" tube x 1/2" MNPT or 1/2" tube Mounting:

x G 1/2 compression fitting Others available, consult factory