DewPro® MMR 101

High-Temperature Moisture Transmitter

A high-temperature loop-powered moisture and temperature transmitter with two current loops for in-line measurement. Simple two-wire or four-wire connection and rugged, stable housing ensure trouble-free mounting indoors or outdoors.

Features:

- Operating temperature up to 150°C (302°F)
- 0 to 100% relative humidity
- Dew point 0°C to 150°C (32°F to 302°F)
- 4 to 20 mA loop-powered
- Second isolated 4 to 20 mA loop for temperature measurement (patented)
- 1/2" MNPT or other process connections
- Capacitive polymer sensor
- Platinum RTD temperature senor
- Microprocessor electronics in NEMA 4X enclosure (IP 66)
- IS or x-proof FM approved

3.60[91.4] - IP66 EPOXY COATED CAST ALUM. HOUSING THAT MEETS NEMA 4X REQUIREMENTS AMBIENT TEMP = +5 F TO +185' F 16.2 [411.5] - I/2" MNPT COMPRESSION FITTING FLANGE OPTIONAL SINTERED END CAP 50[12.70]

Options:

- Integral Display with user interface
- English or Metric fittings
- External display available with loop-powered supply and alarm
- DewPro Communication Software contacts

Ordering Information: See page 10

Specifications

Sensing Element: Polymer; capacitance

 RH Range:
 0 to 100%

 RH Accuracy:
 ±2%

 RH Resolution:
 ±0.02%

RH Repeatability: ±1%

Temperature Senor: Platinum RTD

Process Temperature

Range: $0^{\circ}\text{C to } +150^{\circ}\text{C } (+32^{\circ}\text{F to } +302^{\circ}\text{F})$

Temperature Accuracy: ±1.1 °C (±2°F)
Temperature Resolution: 0.05°C (0.09°F)

Operating

Temperature Range: Electronics, -40°C to +85°C (-40°F to 185°F)

Maximum Operating

Pressure: 150 psi (10.2 bar)

Electronics: Microprocessor controlled, loop-powered

EMI/RFI Protection: Meets IEC 801-1 through 801-6

Loop Power Supply: 24 V DC nominal, 12 to 32 V DC range

Outputs: Two fully isolated 4 to 20 mA current loops (moisture and temperature) patented (U.S.

patent #5,677,476)

Hardware Selectable

Units:

0% to 100% RH, 0° C to 100° C or 32° F to 212° F dew point (up to 320° F or 150° C under system pressure), 0 to 1000 g/m³ absolute humidity, and 0 to 1000 g/kg

mixing ratio dry air

Standard Temperature

Output:

 0°C to 150°C (32°F to 302°F) range

Display:

4-digit numeric display with bar graph and matrix position indication. Four user

interface keys for unit selections, output adjustments and ranging

NEMA 4X (IP 66) or X-proof

Probe Tube: 316 SS, 0.5" diameter. Adjustable insertion

length from 3" (76.33 mm) to 14.25" (362

mm)

Typical Mounting

Adapter:

Protection:

1/2" tube x 1/2" MNPT compression fitting;

flanges and other sizes available upon request

Sensor Guard: 40 micron sintered filter, 316 SS cap

Weight: 4.4 lbs (2 kg)