Features

- Loop-powered, 4 to 20 mA transmitter

- Proven polymer capacitive sensor for fast response and calibration stability

- Trouble-free indoor or outdoor mounting

- Simple field recalibration with salt bottles

- Microcontroller electronics in Type 4X/IP67 enclosure

Options

- Integral display with user interface

- English or metric fittings

- External display available with loop-powered supply and alarm contacts

- Second isolated loop (patented) for temperature

- Wall mount kit

The DewPro MMR31 loop-powered moisture transmitter represents a simple, cost-effective solution for mid-range moisture measurements. The DewPro MMR31 uses a proven polymer capacitive sensor to provide a measurement range of 0 to 100% RH with an accuracy of ±2% in the range of 0 to 90% and ±3% in the range of 90 to 100%. A patented second isolated loop for temperature measurement is also available. The optional integrated display with user interface provides full programming and diagnostic capability.

The DewPro MMR31 provides a wide range of process humidity measurements, including relative humidity, dew point temperature, absolute humidity, and mixing ratio. These key parameters will help monitor and control critical processes. Whether you need to improve product economy, increase product quality, maintain comfort levels, or preserve the properties of stored foods or other supplies, the DewPro MMR31 allows application flexibility.

DewPro® MMR31
Moisture Transmitter

DewPro MMR31 is a General Eastern product. General Eastern has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.

DewPro MMR31 Specifications

Sensing Element
Silicon-based polymer, capacitance principle, IC electronics

RH Range
0 to 100%

RH Accuracy at 77°F (25°C)
±2% in the range of 0% to 90%
±3% in the range of 90% to 100%

Dew Point Range
5°F to 185°F (-15°C to 85°C)

Dew Point Accuracy
±1.8°F (±1°C) above 32°F (0°C) dewpoint @ 25°C

Operating Temperature Range
Process: 5°F to 185°F (-15°C to 85°C); temperature signal available with second loop
Electronics: -40°F to 185°F (-40°C to 85°C)

Temperature Accuracy
±0.9°F (±0.5°C)

Absolute Humidity Range
1 to 350 g/m^3

Mixing Ratio Range
1 to 830 g/kg

Maximum Operating Pressure
250 psia (17 bar)
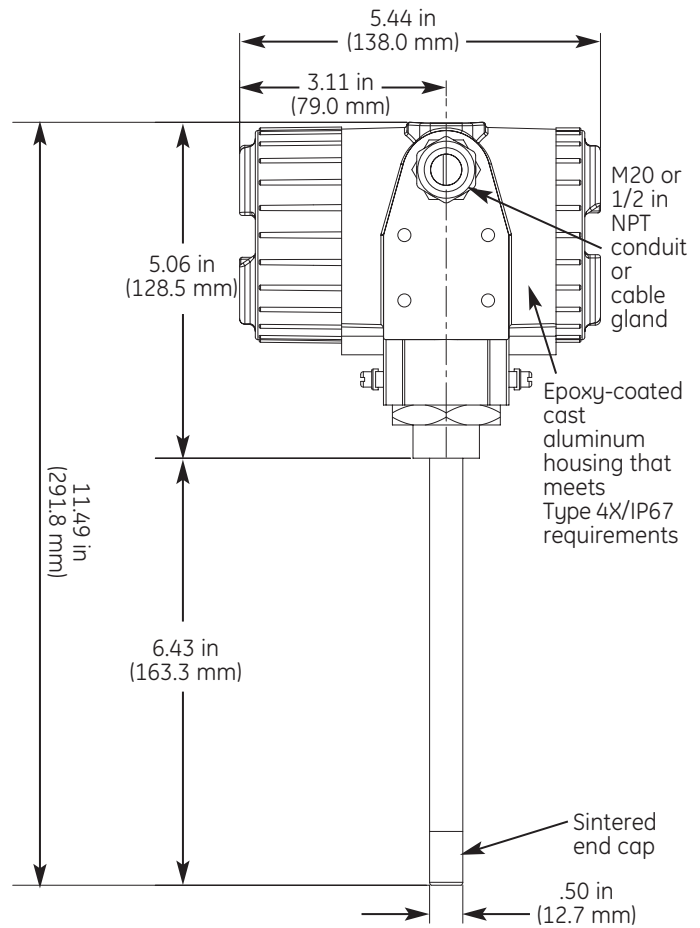Filter element: 100 microns sintered stainless steel

Outputs
Loop current 4 to 20 mA, 16 µA resolution. Optional output for temperature

Hardware Selectable Units
% RH, dew point temperature in °F or °C, absolute humidity in g/m^3, or mixing ratio in g/kg

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

5.44 in (138.0 mm)
3.11 in (79.0 mm)
5.06 in (128.5 mm)
11.49 in (291.8 mm)
6.43 in (163.3 mm)
M20 or 1/2 in NPT conduit or cable gland
Epoxy-coated cast aluminum housing that meets Type 4X/IP67 requirements
Sintered end cap
.50 in (12.7 mm)

DewPro MMR31 with optional display

Power Supply
24 VDC nominal, 12 to 30 VDC range

Protection
Type 4X/IP67

Probe Tube
316 stainless steel, 1/2 in (12.7mm) diameter, insertion length 3.0 in (75mm) to 5.9 in (150mm), adjustable

Typical Probe Mounting
1/2 in tube x 1/2 in NPT-M or 1/2 in tube x G 1/2 compression fitting

Weight
3.3 lb (1.5 kg)

European Compliance
Complies with EMC Directive 89/336/EEC and PED 97/23/EC for DN<25

CE

www.gesensing.com