









Envent Model M70XP

Moisture Monitor with Auto-Zero

The Model M70XP is designed to monitor moisture/water content in natural gas applications. A heated conductive polymer sensor that provides a linear output of moisture concentration is incorporated into the design of the instrument. The M70XP also offers an integrated sample conditioning system and Auto-Zero function that zeros the sensor on a daily or other configurable schedule.

Features

- Range: 0–20lbs/mmscf (custom ranges available)
- Rugged mechanical design
- Affordable measurement
- Unit will display in ppmv or lbs/mmscf
- 2% of reading or 10 ppm (0.5 lb per million) accuracy
- 4–20 mA output and alarms
- RS-232 and RS-485 Serial Communications
- Low power consumption
- Dual-line, 16-character display
- Daily Auto-Zero



Many natural gas tariff limits are set at 4 lbs water per million standard cubic feet. This is closely equivalent to 80 ppm or 64 mg/m³. The sensor is controlled to $60\,^{\circ}\mathrm{C}$ and operated at atmospheric pressure to maximize resistance to process variables and adsorption of stream contaminants.

Foul resistant. The M70XP offers industry leading value in price while still maintaining reliability. The rugged sensor is resistant to chemical fouling such as amines and glycols and methanol and can be washed with alcohol without permanent damage.

Removable Sensor. The M70XP sensor can be readily removed for cleaning or replacement with standard tools in minutes.

Minimal Power. The standard M70XP uses less than 6 watts power when installed in areas where ambient temperature is more than 0° C. This means it can be used at sites where only solar or other minimal power is available.

Additional Advantages

- Quick Delivery.
- Full service & training.



M70XP Moisture Monitor



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M70XP Moisture Monitor with Auto-Zero in a Fiberglass Enclosure

M70XP Moisture Monitor with Auto-Zero in a Heated, Insulated Carbon Steel Enclosure

Specifications

Power 12–24 VDC Standard

100-240 VAC Optional

Electrical Classification Certified for Class I, Div 1, Grps B, C & D

Ambient 0 to 50°C, 32 to 122°F (standard)

Consult factory for other requirements

Output Ranges 0–20 lbs/mmscf standard

10-300 ppm (optional)

Response time 20 seconds to 90% of step change wetting

300 seconds to 90% dry down

Accuracy \pm 2% of reading or \pm 10 ppm (0.5 lbs/mmscf), whichever

is greater

Outputs 4-20 mA loop (concentration only)

Serial RS-232 (all parameters) Dual 3 A solid state alarm relays

Modbus (optional)

LCD Display Dual-line, 16 character display

Line 1: Moisture in ppmv or lbs/mmscf

Line 2: Alarm state, Heater duty, Offset, Sensor gain factor, Raw mV, Alarm set point(s), Temperature °C (°F optional), Temperature set point, Calibration gas set

point, Initiate manual calibration

Auto Zero Includes ASCO solenoid and extra flow meter. Inlet

sample is dried daily (configurable) for 15 minutes in a Moleseive Moisture trap at 80 psig to provide a zeroing

of the sensor.

Data Logging 6500 data points recorded every 10 minutes Standard

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