

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: 0.5 – 20 lbs/mmscf or 11 – 420 ppm (other options available upon request)
- Rugged mechanical design
- Affordable measurement
- Unit will display in ppmv or lbs/mmscf
- 4 – 10 mA output and alarms
- RS-232 and RS-485 Serial Communications
- Low power consumption
- Dual-line 16-character display
- Daily Auto-Zero

Benefits

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°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, 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.



M70XP Moisture Monitor with Auto-Zero



M70XP Moisture Monitor with Auto-Zero
in a heated, 316SS NEMA4X enclosure





M70XP Moisture Monitor with Auto-Zero in a Fiberglass Enclosure

Specifications

Power

12 – 24 VDC Standard
100 – 240 VAC Optional

Electrical Classification

Certified for Class I, Division 1, Groups B, C & D

Ambient

0°C to 50°C (32°F to 122°F) – Standard
Consult factory for other requirements

Output Ranges

0.5 – 20 lbs/mmscf standard
or 11 – 420 ppm
Other options available upon request

Response Time

20 seconds to 90% of step change wetting
300 seconds to 90% dry down

Repeatability

± 0.5 lbs/mmscf within range of 0.5 – 10 lbs/mmscf
± 1 lbs/mmscf within range of 10 – 20 lbs mmscf

Outputs

4 – 20 mA loop (concentration only)
Serial RS-232 (all parameters)
One (1) powered alarm relay (12 V 3A)
Modbus (optional)

LCD Display

Dual-line, 16-character display
Line 1: Moisture in ppmv or lbs/mmscf
Line 2: Alarm state, Heater duty, Offset, Raw mV, Alarm set point(s), Temperature °C (°F optional), Manual zero

Auto Zero

Includes ASCO solenoid. Inlet sample is dried daily (configurable) for 15 minutes in a Molesieve Moisture trap at 10 – 15 psig to provide a zeroing of the sensor.

Data Logging

6500 data points recorded every 10 minutes standard



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