

# Envent Model M80XP

## Methane Monitor

The M80XP Methane monitor has been designed for easy integration into a wide range of gas detection systems where high quality, long-term stability, excellent repeatability, and reliable measurement of Methane gas concentrations are required.

These features can be attributed to a proprietary dual-wavelength, fail-to-safe, infrared (NDIR) sensor technology. The M80XP provides solutions for measuring and analyzing both industrial and environmental gases.

### Applications

- CH4 is measured routinely in natural gas for product quality and process control purposes.
- Natural gas plants
- Biogas Plants
- Wastewater facilities
- Agriculture
- Green Waste
- Landfills

### Features

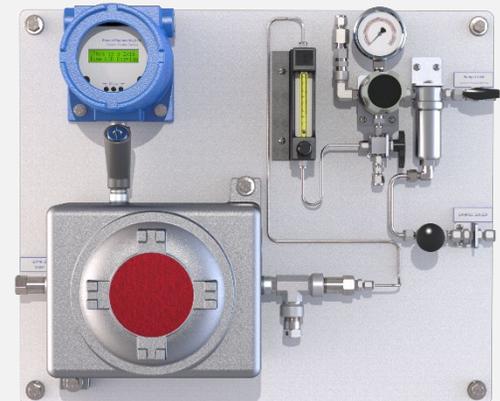
- On-board barometric pressure correction in the range 800 mbar – 1150 mbar
- Common ranges are from 0 – 5% for sales gas and up to 0 – 30% for inlet CH4 concentration
- Field replaceable IR source
- Extensive temperature compensation
- Low power consumption
- Fast response time (< 10 seconds)
- Natural gas and biogas application specific sensors

### Benefits

- Quick delivery on standard systems
- Full service & training
- Custom sample systems designed per your specific application

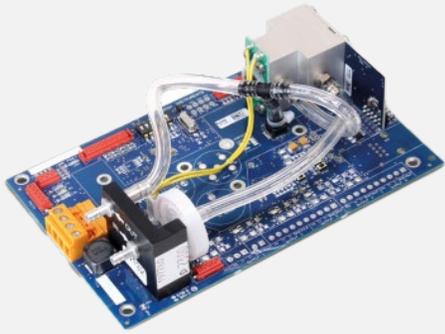


Envent M-Series housing



Envent M80 with standard sample conditioning system





Infrared Sensor

The M80XP methane monitor can function as a stand-alone device or be integrated with other Envent analyzers for a comprehensive biogas monitoring solution.



## Specifications

### Operating Power

24 VDC Standard  
12 VDC, 120/240 VAC optional

### Electrical Classification Operating Principle

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

Dual-beam, non-dispersive infrared (NDIR)

### Detector

Robust infrared source, a gas sampling cell, two infrared filters, and a matched twin-element detector.

### Sensing Cell Proof Pressure (Sample cell only)

800 – 1150 mbar at 200 – 1200 cc/min

### Measurement Range

0 – 100 % CH<sub>4</sub> in Biogas

### Repeatability

+/- 0.1% of reading

### Drift

+/- 2% of range over 12 months

### Accuracy

+/- 2% of range  
+/- 0.015% of range per mbar

### Warmup time

1 min initial, 30 min full specification

### Operating Temperature

0°C to 45°C (32°F to 113°F)

### Operating Humidity

0 – 95% RH non-condensing

### Digital Interface

RS-232 (all parameters)

### Analog Output

Isolated 4 – 20 mA (concentration only)

### Alarm Outputs

2 solid state drivers 2 Amp, 30 VDC maximum

### Source Life

10 years minimum

### Contaminant Sensitivity

Resistant to mercaptans, methanol, glycol, and amines

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