

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	Class I, Division 1, Groups B, C & D
Operating Principle	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 % CH4 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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