

## Envent Model M80XP

### Methane Monitor

The M80XP infrared gas sensor 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

- CH<sub>4</sub> is measured routinely in natural gas for product quality and process control purposes. Common ranges are from 0-5% for sales gas and up to 0-30% for inlet CH<sub>4</sub> concentration.
- Biogas plants.
  - Wastewater facilities
  - Agriculture/farming
  - Green Waste

### Features

- On-board Barometric Pressure Correction in the range 800 mbar – 1150 mbar
- Field Replaceable IR Source
- Extensive Temperature compensation
- Low power consumption
- Fast response time (<10s)
- Natural gas and Biogas application specific sensors

### Benefits

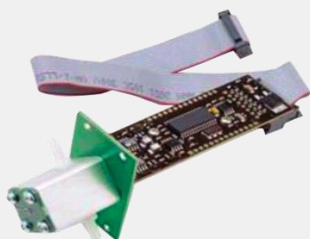
- Quick delivery on standard systems.
- Full service & training.
- Available with differing sample systems and accessories as required in various applications.



Model M80XP



Model M80XP for ppm  
Measurement



Dual Beam Infra-Red Sensor



M90XP Fiberglass Enclosure

## Specifications

<b>Operating Power</b>	24 VDC standard 12 VDC, 120/240 VAC optional
<b>Electrical Classification</b>	Class I, Division 1 Groups B, C & D
<b>Operating Principle</b>	Dual-beam, non-dispersive infrared (NDIR)
<b>Detector</b>	Sapphire window with glass frit seal
<b>Sensing Cell Proof Pressure (Sample cell only)</b>	5-25 psig
<b>Measurement Range</b>	0-20% Standard 0-100% Optional Other ranges available
<b>Repeatability</b>	± 0.1 % of reading
<b>Drift</b>	Less than 2.5% of reading/year
<b>Accuracy</b>	± 3% of reading or 0.1% CO <sub>2</sub> at cal temperature, ± 5% of reading or 0.1% CO <sub>2</sub> over full operating temperature range
<b>Warmup time</b>	Less than 5 minutes
<b>Operating Temperature</b>	10 to 50°C (standard)
<b>Operating Humidity</b>	Sensing Cell: 0-100% RH (non-condensing) Electronics: 0 - 90% RH (non-condensing)
<b>Storage Temperature</b>	-20 to 60°C (-4 to 140°F)
<b>Storage Humidity</b>	0-90% RH (non condensing)
<b>Digital Interface</b>	RS-232 (all parameters)
<b>Analog Output</b>	Isolated 4-20 mA (concentration only)
<b>Alarm Outputs</b>	2 solid state drivers 2 Amp, 30 VDC maximum
<b>Source Life</b>	10 years minimum
<b>Standard Sample System</b>	Inlet filter (1500psig/103bar max) SS single stage regulator (3000psig/207bar max) Flow meter (100psig/6.9bar max)
<b>Contaminant Sensitivity</b>	Resistant to Mercaptans, Methanol, Glycol, Amines