



• Features

- Responds accurately to over 14 gases, with a calibration to methane
- No conversion factors needed
- Immune to poisons such as H₂S, Silicone, and HCFC's
- Requires only annual field response checks
- Can be used in high humidity conditions
- Compatible with M2A, S2 & Direct Connect
- Explosion proof approval C_{ULUS}
- Long sensor life
- Two year warranty on the sensor (1 year on electronics)
- Order info:

61-0230: LEL, MPS type sensor, 3/4 inch NPT

61-1020: LEL, Direct Connect, MPS type detector with XP J-Box

65-2380: LEL, S2, MPS type sensor/transmitter/XP J-Box

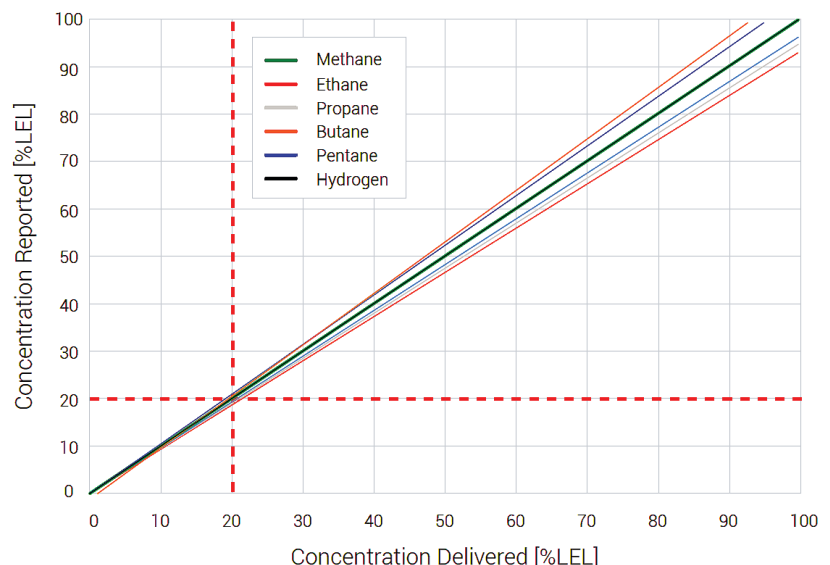
65-2650: LEL, M2A, MPS type sensor/transmitter with J-Box

• Applications

- Applications where silicone is present
- High humidity applications where IR or catalytic may not hold up
- Applications where a mixture of hydrocarbons could be present
- H₂ applications where poisoning of the sensor is a concern

Utilizing a new sensor technology, the MPS (Molecular Property Spectrometer) sensor internally identifies the gas or gases being detected, and applies the appropriate LEL conversion factor so that it will read a variety of flammable gases or vapors correctly by just utilizing a methane calibration. Other sensor technologies, such as catalytic or IR sensors, require a conversion factor to be applied during calibration or that it needs to be calibrated to the specific gas desired to be detected. This is not the case with the MPS sensor. Capable of detecting over a dozen different combustible gases simultaneously, including Hydrogen, the Molecular Property Spectrometer is unsurpassed in reliability, accuracy, and worker safety. No other sensor can match the accuracy of the MPS in reporting 0-100% LEL across multiple gases. The MPS's robust design means it won't drift, decay, or poison over time. Expected sensor life is over 10 years in normal applications.

Gas	Range	Accuracy
Butane C ₄ H ₁₀	0-100 %LEL	±5 %LEL
Ethane C ₂ H ₆	0-100 %LEL	±5 %LEL
Hydrogen H ₂	0-100 %LEL	±5 %LEL
Isobutane HC(CH ₃) ₃	0-100 %LEL	±5 %LEL
Isobutylene C ₄ H ₈	0-100 %LEL	±5 %LEL
Isopropanol C ₃ H ₈ O	0-100 %LEL	±10 %LEL
Methane CH ₄	0-100 %LEL	±3 %LEL
Methyl ethyl ketone C ₄ H ₈ O	0-100 %LEL	±5 %LEL
Octane C ₈ H ₁₈	0-100 %LEL	±5 %LEL
Pentane C ₅ H ₁₂	0-100 %LEL	±5 %LEL
Propane C ₃ H ₈	0-100 %LEL	±6 %LEL
Propylene C ₃ H ₆	0-100 %LEL	±5 %LEL
Toluene C ₇ H ₈	0-100 %LEL	±12 %LEL
Xylene C ₈ H ₁₀	0-100 %LEL	±12 %LEL



Compatible Transmitters



M2A

The M2A model is an explosion proof transmitter that can operate as a standalone system or as part of a system connected with an analog or digital signal to a controller, PLC, or DCS. The M2A utilizes a magnetic wand technique for performing non-intrusive calibration. The housing does not need to be opened for zeroing or calibration.

- Direct digital readout
- Explosion proof housing
- Operates independently or with any controller, PLC or DCS
- 4-20 mA transmitter
- Digital Modbus output
- Operates from 10-30 VDC
- 2 programmable alarm relays, plus fail relay
- Auto zero drift correction
- Non intrusive calibration via magnetic wand

65-2650RK: LEL, M2A, MPS type sensor/transmitter with J-Box

81-FMPS-CH4: Cal Kit, fixed, MPS sensor, CH4 50% LEL in real air (CO2 0.04% / Ar 0.91% / O2 20.43% balance N2), 103 liter steel, regulator, screwdriver, case & tubing



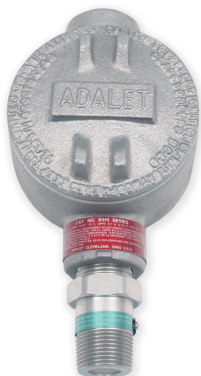
S2 Series

The S2 Series Transmitter electronics are encased inside a potted package to avoid damage from mechanical abuse or corrosion, and housed in an explosion-proof enclosure. S2 transmitters are also available with stainless steel enclosures.

- Explosion proof housing
- Stainless steel enclosures available
- Patented water repellent sensor coating
- Remote mount sensor with calibration adapter
- 4-20 mA transmitter
- Operates from 10-30 VDC

65-2380: LEL, S2, MPS type sensor/transmitter/XP J-Box

81-FMPS-CH4: Cal Kit, fixed, MPS sensor, CH4 50% LEL in real air (CO2 0.04% / Ar 0.91% / O2 20.43% balance N2), 103 liter steel, regulator, screwdriver, case & tubing



Direct Connect

The Direct Connect sensors can be used in two different ways. The sensors can be mounted directly to the controllers as a complete stand alone system, or they can be mounted to explosion proof junction boxes for remote detection. The plug-in design allows quick replacement in the field with no tools required. The Direct Connect sensors can be used either indoors or outdoors. The flame arrestors utilizes a patented coating, which makes it water repellent.

- Connect directly to a Beacon controller
- Explosion proof housing
- Stainless steel enclosures available
- Patented water repellent sensor coating

61-1020: LEL, Direct Connect, MPS type detector with XP J-Box

81-FMPS-CH4: Cal Kit, fixed, MPS sensor, CH4 50% LEL in real air (CO2 0.04% / Ar 0.91% / O2 20.43% balance N2), 103 liter steel, regulator, screwdriver, case & tubing



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