

Universal Gas Detector

Features

- ✓ Universal transmitter, connects to any PureAire toxic and corrosive gas sensor
- ✓ Plug & Play sensor sets the transmitter gas and range
- ✓ Dual level user adjustable alarm relays and
- ✓ 4-20mA analog output
- ✓ Built-in audible horn and visual alarm LED's
- ✓ Supervised electronics continuously checks sensor and system status
- ✓ Low-cost long life renewable sensor, \$35 per recharge
- ✓ Quick and simple remote sensor gas calibration; calibration span stays with the sensor
- ✓ Optional remote cable locates sensor up to 30 feet from transmitter
- ✓ Stand-alone operation or connect to PLC or SCADA controller
- ✓ Flexible, just plug in a new sensor to provide a new gas on the spot

Made in USA



The PureAire **Universal Gas Detector** is a compact gas monitor that's ideal for protecting workers from toxic and corrosive gas exposures in the workplace. It consists of a generic transmitter/controller connected to a dedicated, renewable gas sensor that automatically inputs the gas and measurement range. Designed as a stand-alone monitor, the **Universal Gas Detector** can also be connected to any programmable logic controller or SCADA system.

The heart of the system is a smart renewable sensor cell that's programmed with the specific gas and measurement range information. Simply plug the sensor into any **Universal Gas Detector** transmitter and it's ready to go. When servicing the sensors, they can be recharged with fresh electrolyte and dynamically gas calibrated in the maintenance shop away from the transmitter.

Low Annual Operation Cost

The **Universal Gas Detector** has the lowest annual maintenance costs of any gas monitoring system on the market. PureAire Renewable sensors are easily recharged with electrolyte right in the field at approximately 20% of the cost of disposable sensor cell type systems. Routine maintenance materials are \$70 per year and when compared to the high cost of disposable sensors, can save you hundreds of dollars in annual service!

Stand-Alone Monitoring

The **Universal Gas Detector** is designed to operate totally stand-alone. Just mount it to the wall near the risk site and plug in the wall wart regulated power supply into any 115VAC 60 Hz outlet or 220VAC 50 Hz outlet and you're up and monitoring. The built-in horn and LED alarm indicators quickly alert personnel to a hazardous condition. It also has individual alarm and fault relays for connecting remote alarms or control and the analog 4-20mA output provides continuous data to remote PLC and SCADA systems.

Continually supervised electronics

The **Universal Gas Detector** detectors "smart" circuitry is continuously supervised 24-7 and should a system error occur, the detectors analog output and fault relay immediately alerts control room personnel to the problem. A dedicated microcontroller built directly into the sensor allows you to remove from it the transmitter for all routine calibration and maintenance. Calibration data is directly entered into the sensor electronics and then transferred to the transmitter once it's plugged in.

Specifications

Sampling Method	Diffusion. (Optional: sensor can be remote up to 30 feet from transmitter)
Available Gases	ammonia, bromine, chlorine, fluorine, hydrogen bromide, hydrogen chloride, hydrogen cyanide, hydrogen fluoride, hydrides, hydrazine, nitrogen dioxide, phosphine and sulfur dioxide. Other gases available; consult PureAire.
Accuracy	± 10% of full scale
Operating Temperature	-25 to +122F (-32 to +50C)
Sensor Type	Renewable electrochemical self-checking sensor with built-in microprocessor
Sensor Life	3 to 8 years under normal conditions
Gas concentration indicator	Built-in LCD digital display, (back lit) Displays: Gas Name & ppm concentration, AL1, AL 2, System Fault messages.
Signal Outputs	4-20 mA analog output Alarm Relay Level 1 – SPDT 2 amps 24 VAC, 24 VDC Alarm Relay Level 2 - SPDT 2 amps 24 VAC, 24 VDC Fault Relay - SPDT 2 amps 24 VAC, 24 VDC
Power Requirements	24 VDC, .1 amp Regulated power supply required
Dimensions	5.5 (W) x 10.5 (H) x 3.25 (D) inches; (140 x 267 x 83 mm)
Weight	1.2 lbs. (.5 kg)
Enclosure	Polycarbonate UL listed general purpose Optional NEMA 4X, IP 65 water resistant, (only available without built-in horn)

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