

## ONE TO SIX GAS PORTABLE MONITOR

### Features

Monitor up to 6 different gases

PPM, %LEL, or %Vol. auto-ranging combustible detection

Specialty Sensors:

**PID (Photoionization Detector)**

- Low or high range for VOC detection
- Fence Electrode Technology for humidity and contamination resistance

**Infrared (IR)**

CO<sub>2</sub>, %LEL CH<sub>4</sub>, %Vol. CH<sub>4</sub>, %LEL HC, %Vol. HC

**Thermal Conductivity (TC)**

%Vol. H<sub>2</sub>, %Vol. CH<sub>4</sub>

**Smart toxic, plug and play sensors**

NH<sub>3</sub>, AsH<sub>3</sub>, Cl<sub>2</sub>, HCN, PH<sub>3</sub>, & SO<sub>2</sub>

**Hydrogen specific LEL / ppm sensor**

Powerful long-life pump up to 125' range

Low flow pump shut off and alarm

Methane elimination for environmental use

Alkaline 18 hours or NiMH 20 hours capability

EPA Method 21 VOC Monitoring

Internal hydrophobic dust filter

External probe with hydrophobic filter

Multilingual (5 languages)

Ergonomic RFI / EMI / chemical / weather resistant enclosure

Intrinsically safe design, CSA approval

Datalogging standard



### Operating Modes

The EAGLE 2 is the solution for just about any portable gas monitoring situation. Equipped with features that are not available on competitive units, the EAGLE 2 is a powerful instrument that does more than just offer the standard confined space protection for LEL, O<sub>2</sub>, H<sub>2</sub>S and CO. The EAGLE 2 offers easy access to controls such as autocalibration, alarm silence, demand zero, peak hold, and methane elimination. Each channel has two alarm levels plus TWA and STEL alarms for toxic channels. The two alarm levels are user adjustable and can be latching or self resetting.

The EAGLE 2 available features include a PID sensor for detecting high or low ppm levels (0-50 & 0-2,000) of VOC gases; % volume capability for CH<sub>4</sub> and H<sub>2</sub> using a TC (thermal conductivity) sensor; PPM or LEL hydrocarbon detection at the push of a button; infrared sensors for CO<sub>2</sub> (ppm or % volume), methane or hydrocarbons in LEL and % volume ranges; methane elimination feature for environmental applications;

and a variety of super toxic gases. The EAGLE 2 has a strong internal pump with a low flow auto pump shut off and alarm, which can draw samples from up to 125 feet. This allows for quick response and recovery from distant sampling locations. The EAGLE 2 will continuously operate for over 18 hours on alkaline batteries or 20 hours on NiMH. A variety of accessories are also available to help satisfy almost any application such as long sample hoses, special float probes for tank testing, and dilution fittings, just to name a few. Datalogging is a standard feature for all sensors on all versions.

The Eagle 2 is ideal for performing EPA Method 21 fugitive emission monitoring of VOC leaks from process equipment. EPA Method 21- Determination of Volatile Organic Compound Leaks, is a test method used for the determination of leaks of VOCs from process equipment. The Eagle 2 meets the requirements for portable instruments used for this purpose as outlined in Sections 6 and 8 of Method 21.

<b>Enclosure</b>	Weatherproof, chemical resistant, RFI / EMI coated high impact polycarbonate-PBT blend. Can operate in 2.0" of water without leakage. Ergonomically balanced with rugged top mounted handle. Water & dust resistant equivalent to IP64.
<b>Dimensions</b>	9.5" L x 5.25" W x 5.875" H
<b>Weight</b>	3.8 Lbs (standard 4 gas with batteries).
<b>Detection Principle</b>	Catalytic combustion, electrochemical cell, galvanic cell, infrared, Photoionization detector, and thermal conductivity.
<b>Sampling Method</b>	Powerful, long-life internal pump (over 6,000 hours) can draw samples over 125 feet. Flow rate approximately 2.0 SCFH.
<b>Display</b>	3 display modes: display all gases, large font-autoscroll, or large font-manual scroll. Polyurethane protected overlay. Backlight, illuminates for alarms and by demand, with adjustable time.
<b>Language</b>	Readout can display in 5 languages (English, French, German, Italian, or Spanish).
<b>Alarms</b>	2 Alarms per channel plus TWA and STEL alarms for toxics. The two alarms are fully adjustable for levels, latching or self reset, and silenceable.
<b>Alarm Method</b>	Buzzer 95 dB at 30 cm, four high intensity LED's.
<b>Controls</b>	4 External glove friendly push buttons for operation, demand zero, and autocalibration. Buttons also access LEL/ppm, alarm silence, peak hold, TWA/STEL values, battery status, conversion factors, and many other features.
<b>Continuous Operation</b>	At 70°F, 18 hours using alkaline batteries, or 20 hours using NiMH.
<b>Power Source</b>	4 alkaline or NiMH, size C batteries (Charger has alkaline recognition to prevent battery damage if charging is attempted with alkalines).
<b>Operating Temp. &amp; Humidity</b>	-20°C to 50°C (-4°F to 122°F), 0 to 95% RH, non-condensing.
<b>Environmental</b>	IP-64
<b>Response Time</b>	30 Seconds to 90% (for most gases) using standard 5 ft hose.
<b>Safety Rating</b>	Intrinsically Safe, Class I, Groups A, B, C, D. Approvals: CSA / CE
<b>Standard Accessories</b>	Shoulder strap, alkaline batteries, hydrophobic probe, and 5 foot hose, internal hydrophobic filter.
<b>Optional Accessories</b>	<ul style="list-style-type: none"> <li>Dilution fitting (50/50)</li> <li>NiMH batteries</li> <li>Battery charger, 115 VAC, 220 VAC, or 12 VDC (charge time 4 hours)</li> <li>Continuous operation adapter, 115 VAC or 12 VDC</li> <li>Extension hoses</li> <li>IRDA cable for datalogging download</li> </ul>
<b>Warranty</b>	Two year material and workmanship, one year for PID sensor.

\*Specifications subject to change without notice

Gas	Measuring Range	Accuracy * Which ever is greater
<b>Gases &amp; Detectable Ranges</b>		
<b>Standard Confined Space Gases</b>		
Hydrocarbons (CH <sub>4</sub> , std)	0 - 100% LEL	± 5% of reading or ± 2% LEL (*)
	0 - 5% Vol. (CH <sub>4</sub> )	
	0 - 50,000 ppm	± 50 ppm or ± 5% of reading (*)
Oxygen (O <sub>2</sub> )	0 - 40% Vol.	± 0.5% O <sub>2</sub>
Carbon Monoxide (CO)	0 - 500 ppm	± 5% of reading or ± 5 ppm CO (*)
Hydrogen Sulfide (H <sub>2</sub> S)	0 - 100 ppm	± 5% of reading or ± 2 ppm H <sub>2</sub> S (*)
<b>Toxics</b>		
Ammonia (NH <sub>3</sub> )	0 - 75 ppm	± 10% of reading or ± 5% of full scale (*)
Arsine (AsH <sub>3</sub> )	0 - 1.5 ppm	
Chlorine (Cl <sub>2</sub> )	0 - 3 ppm	
Hydrogen Cyanide (HCN)	0 - 15 ppm	
Phosphine (PH <sub>3</sub> )	0 - 1 ppm	
Sulfur Dioxide (SO <sub>2</sub> )	0 - 6 ppm	
<b>IR Sensors</b>		
Carbon Dioxide (CO <sub>2</sub> )	0 - 10,000 ppm	± 5% of reading or ± 2% of full scale (*)
	0 - 5% Vol.	
0 - 60% Vol.		
Methane (CH <sub>4</sub> )	0 - 100% LEL / 0 - 100% Vol.	
Hydrocarbons	0 - 100% LEL / 0 - 30% Vol.	
<b>PID Sensors</b>		
VOC	0 - 2,000 ppm 0 - 50 ppm	—
<b>TC Sensors</b>		
Methane (CH <sub>4</sub> )	0 - 100% Vol.	± 5% of reading or ± 2% of full scale (*)
Hydrogen (H <sub>2</sub> )	0 - 10% Vol. 0 - 100% Vol.	
<b>Hydrogen Specific</b>		
Hydrogen (H <sub>2</sub> )	0-100% LEL 0-40,000 ppm	± 5% of reading or ± 2% of full scale (*)

The EAGLE 2 can be configured with up to 6 gas sensors from the above list.