

INERT ATMOSPHERE GAS MONITOR

Gas Detection For Life

EAGLE 2 Inert Monitor



It is important to use the proper type of gas meter while working in an inert atmosphere. Inert atmospheres are created when oxygen is displaced by an inert gas, and often a high concentration of explosive gas may be present. An example of an inert atmosphere is the nitrogen purged catalyst units at refineries. When workers perform any catalyst handling functions in the reactors, special precautions are taken for their inert entry. In these low oxygen conditions, a standard catalytic bead sensor used for combustible gas detection does not operate correctly. RKI's Eagle 2 uses an infrared (IR) sensor to detect combustible gas from 0-100% LEL. IR technology does not require oxygen for operation.

In addition to monitoring for combustible gases, the Eagle 2 has the ability to monitor for rising O2 concentrations and toxic gases H2S and CO. The CO sensor will act as dual sensor for both carbon monoxide and hydrogen. Upon start up of the meter, the user selects either normal or inert mode to select the proper alarm levels for the application. With its powerful pump the Eagle 2 can be used with up to a 125' hose, allowing the meter to stay with the hole attendant while monitoring the working conditions inside the cracking unit.

The Eagle 2 has the sensor technology needed for inert entry and is designed to withstand the extreme conditions surrounding the catalyst operations.

Simplify maintenance and record keeping with the Eagle 2's docking and calibration station, the SDM-E2. Automatically charge bump test, calibrate, and archive instrument records using the SDM-E2.

RKI Instruments, Inc. • 33248 Central Ave. Union City, CA 94587 • Phone (800) 754-5165 • (510) 441-5656 • Fax (510) 441-5650

EAGLE 2 Inert Monitor

Accuracy

Specifications		
Enclosure	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.	
Dimensions	9.5" L x 5.25" W x 5.875" H	
Weight	3.8 Lbs (standard 4 gas with batteries).	
Sampling Method	Powerful, long-life internal pump (over 6,000 hours) can draw samples over 125 feet. Flow rate approximately 2.0 SCFH.	
Display	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.	
Language	Readout can display in 5 languages (English, French, German, Italian, or Spanish).	
Alarms	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.	
Alarm Method	Buzzer 95 dB at 30 cm, four high intensity LED's.	
Controls	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.	
Continuous Operation	At 70°F, 18 hours using alkaline batteries, or 20 hours using NiMH.	
Power Source	4 alkaline or NiMH, size C batteries (Charger has alkaline recognition to prevent battery damage if charging is attempted with alkalines).	
Operating Temp. & Humidity	-20°C to 50°C (-4°F to 122°F), 0 to 95% RH, non-condensing.	
Environmental	IP-64 Water resistant	
Response Time	30 Seconds to 90% (for most gases) using standard 5 ft hose.	
Safety Rating	Intrinsically Safe, Class I, Groups A, B, C, D. Approvals: CSA / CE	
Standard Accessories	Shoulder strap, alkaline batteries, hydrophobic probe, and 5 foot hose, internal hydrophobic filter.	
Optional Accessories	 Calibration station NiMH batteries Battery charger, 115 VAC, 220 VAC, or 12 VDC (charge time 4 hours) Continuous operation adapter, 115 VAC or 12 VDC Calibration kits Extension hoses 	
Warranty	Two year material and workmanship.	

Gas	Measuring Range	* Which ever is greater	
Gases & Detectable Ranges			
Oxygen (O ₂)	0 - 40% Vol.	± 0.5% O2	
Carbon Monoxide (CO)	0 - 500 ppm	± 5% of read- ing or ± 5 ppm CO (*)	
Hydrogen Sulfide (H ₂ S)	0 - 100 ppm	± 5% of read- ing or ± 2 ppm H2S (*)	
IR Sensors			
Methane (CH ₄)	0 - 100% LEL	\pm 5% of reading or \pm 2% of full scale (*)	
Calibration Station			
Stand Alone			
		lulti Module System	

Part# 724-001-IR-CAT Description

EAGLE 2 for CH4 % LEL (IR) / O2 / H2S / CO, inert mode for catalyst applications

Other configurations available.

Specifications subject to change without notice.





Authorized Distributor:

Toll Free: (800) 754-5165 • Phone: (510) 441-5656 Fax: (510) 441-5650 • www.rkiinstruments.com

Made in the USA