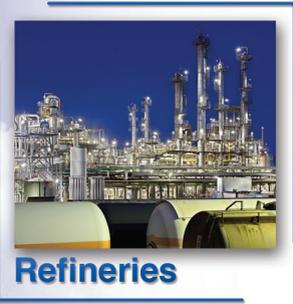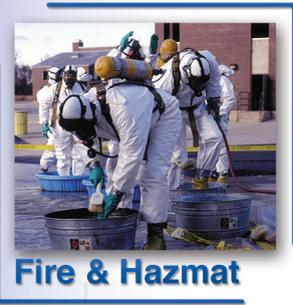# Soaring To New HEIGHTS
The Legacy Continues

Refineries

Fire & Hazmat
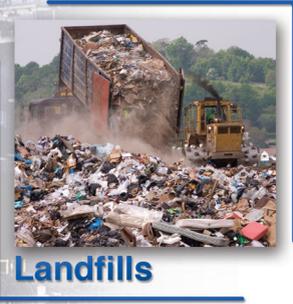
Landfills

Natural Gas

RKI
INSTRUMENTS

RKI
INSTRUMENTS

EAGLE 2

CH4   0%LEL
OXY   20.9vol%
H2S   0.0ppm
CO   0ppm
IBL   0ppm
NH3   0.0ppm

EAGLE 2

| POWER ENTER RESET | DISPLAY ADJUST NO | AIR ▲ YES | RANGE ▼ SHIFT |

EAGLE 2

Inlet fitting

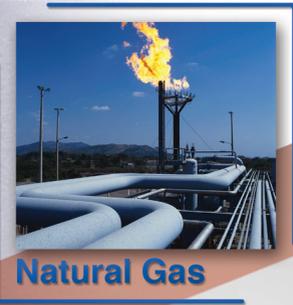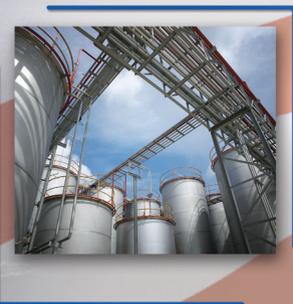Loud buzzer (95dB)

IrDA communication port

Low flow shutoff and alarm

Alarm LED's with wide visibility

Internal / external hydrophobic filters

RKI
INSTRUMENTS

```
CH4      0%LEL
OXY   20.9vol%
H2S     0.0ppm
CO       0ppm
IBL      0ppm
NH3     0.0ppm
```

3 Display modes:
- Display all gases
- Single gas view large type-auto scroll
- Single gas view large type-manual scroll

Self healing polyurethane protective overlay

Powerful internal sample pump with 125' range

Programmable gas channel positions

EAGLE 2

POWER ENTER RESET | DISPLAY ADJUST NO | AIR ▲ YES | RANGE ▼ SHIFT

4 button operation with glow in the dark text

3 Operating modes:
- Normal operating
- Leak check
- Bar hole sampling

Glove friendly handle and buttons

Chemical, water, and dust resistant, RFI / EMI protected high impact case

PID sensor for low ppm VOC detection

Smart plug & play sensors for toxic gases

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

Combine catalytic and IR sensors for combustible detection

Methane elimination for environmental use

3 Specialty Channels

Multi lingual (5 languages)

Standard 4 Gas Channels

Combustible ·
O2 ·
H2S ·
CO ·

6 Channel Capacity

← Option 1
Option 2
Option 3 ←

- **PID (VOC)**
- **Toxics**
  NH3, ASH3, HCN, PH3, SO2
- **Infrared (IR)**
  CO2, CH4, HC
- **Thermal Conductivity**
  CH4, H2

* Some combinations NOT compatible
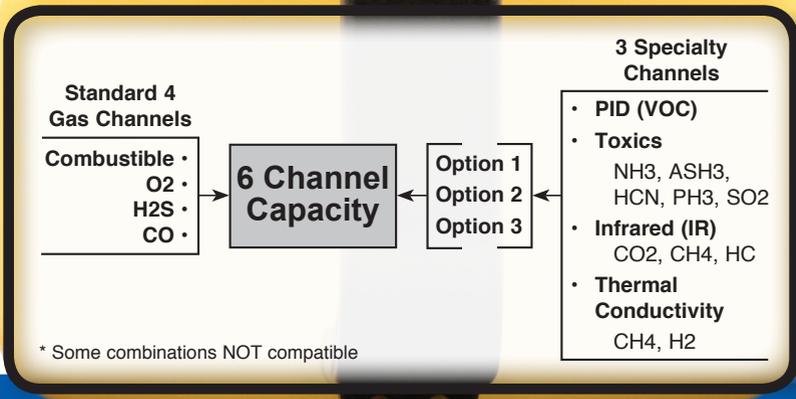
Interchangeable Alkaline / NiMH removable battery compartment

Battery compartment thumbscrew

Specifications

Enclosure	Weatherproof, chemical resistant, anti RFI / EMI coated high impact polycarbonate - PBT blend. Can operate in rain or be set into 2.0" of water without leakage. Ergonomically balanced with rugged top mounted handle.
Dimensions	9.5" L x 5.25" W x 5.875" H (241mm L x 140mm W x 149mm H)
Weight	3.8 Lbs (1.72kg) (standard 4 gas with batteries)
Detection Principle	Catalytic combustion, electrochemical, galvanic, infrared, photo ionization, and thermal conductivity.
Sensor Life	2 Years under normal conditions.
Sampling Method	Powerful, long-life pump (over 6,000 hours) can draw samples over 125 feet. Flow rate approximately 2.0 SCFH
Display	Backlit 128 x 64 graphics display. Viewed through window in case top. Displays readings & status of all 6 channels simultaneously. Backlight, illuminates for alarms and on demand with adjustable time. Optional mode allows automatic or manual scrolling display of just one gas at a time with very large characters.
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, % Vol. alarm silence, peak hold, TWA/STEL values, battery status, conversion factors, and many other features.
Continuous Operation	At 70°F, (21°C) 16 hours using alkaline batteries, or 18 hours using Ni-MH.
Power Source	4 Alkaline or Ni-MH, size C batteries (Charger has alkaline recognition to prevent battery damage if charging is attempted with alkalines).
Operating Temp. & Humidity	-4°F to 122°F (-20°C to 50°C) 0 to 95% RH, non-condensing.
Response Time	30 Seconds to 90% of range (for most gases) using standard 5 ft hose.
Safety Rating	Intrinsically Safe, Class I, Division 1, Groups A, B, C, D.
	Approvals: CSA CE
Standard Accessories	Shoulder strap, alkaline batteries, hydrophobic probe, 5 foot hose, and internal hydrophobic filter
Optional Accessories	• Dilution fitting (50/50) • Ni-MH batteries • Battery charger, 115 VAC, 220 VAC, or 12 VDC (charge time 4 hours) with continuous operation function • Extension hoses
Warranty	Two year material and workmanship, one year for PID sensor

Specifications subject to change without notice

Sensor Technologies

Standard 4 Gas

Specialty Sensors

Smart Toxic Sensors

Catalytic

Gas	Range	Accuracy
Hydrocarbons (CH$_4$, standard)	0 - 100% LEL	± 5% of reading or ± 2% of full scale (*)
	0 - 5% Vol. (CH$_4$)	
	0 - 50,000 ppm (CH$_4$)	± 50 ppm or ± 10% of reading (*)

Combustible level detection displayed in % LEL, PPM, or % volume. Methane is the standard configuration. Other combustible gases available.

Galvanic

Gas	Range	Accuracy
Oxygen (O$_2$)	0 - 40% Vol. 0 - 100% Vol.	± 0.5% O$_2$

A specific electrochemical sensor for oxygen monitoring.

Standard Electrochemical

Gas	Range	Accuracy
Carbon Monoxide (CO)	0 - 500 ppm	± 5% of reading ± 2 ppm (*)
Hydrogen Sulfide (H$_2$S)	0 - 100 ppm	

Extra long-life CO and H$_2$S sensors.

Photo ionization Detection (PID)

Gas	Range
Volatile Organic Compound (VOC)	0 - 50 ppm 0 - 2,000 ppm

Monitor low ppm VOC gases.

Infrared

Gas	Range	Accuracy
Carbon Dioxide (CO$_2$)	0 - 10,000 ppm 0 - 5% Vol. 0 - 60% Vol.	± 5% of reading or ± 2% of full scale (*)
Methane (CH$_4$)	0 - 100% LEL 0 - 100% Vol.	
Hydrocarbons	0 - 100% LEL 0 - 30% Vol.	

Monitor combustible gases in inert environments. Monitor wide range of CO$_2$.

Thermal Conductivity

Gas	Range	Accuracy
Methane (CH$_4$)	0 - 100% Vol.	± 5% of reading or ± 2% of full scale (*)
Hydrogen (H$_2$)	0 - 10% Vol. 0 - 100% Vol.	

Monitor % volume methane or hydrogen.

Smart Electrochemical

Gas	Range	Accuracy
Ammonia (NH$_3$)	0 - 75 ppm	± 10% of reading or ± 5% of full scale (*)
Arsine (AsH$_3$)	0 - 1.5 ppm	
Chlorine (Cl$_2$)	0 - 3 ppm	
Hydrogen Cyanide (HCN)	0 - 15 ppm	
Phosphine (PH$_3$)	0 - 1 ppm	
Sulfur Dioxide (SO$_2$)	0 - 6 ppm	

Monitor a wide variety of toxic gases. Smart plug and play sensors are auto recognized and can be remotely calibrated.

Note: (*) = Whichever is greater

CONFINED SPACE ENTRY

• Monitor LEL, O2, CO, and H2S
• Internal sample pump
   ◊ *Pull samples up to 125'*
   ◊ *Maintain steady sample flow to sensors*
• Audible and visual alarms
   ◊ *2 Ways to communicate with workers*
• Ideal for refinery applications

LEAK INVESTIGATION

• Provides ppm detection of combustible gas
• Barhole mode for tracking leak migration
• Leak check with changing blink / pulsing rate
   ◊ *LED's and alarm tones increase in
     frequency as gas concentration increases*
• Audible alarm silence
   ◊ *Perform leak investigations without alarming residents*

LINE PURGE TESTING

• Thermal conductivity sensor
   ◊ *0 to 100% volume Methane / Hydrogen range*
• Autoranging IR
   ◊ *Automatically changes from
     % LEL to % Vol.*
   ◊ *Displays appropriate unit of measure*

VOC MONITORING

• Robust photo ionization detector (PID)
• Two ranges available,
   ◊ *0-50 ppm or 0-2,000 ppm*
• Can be combined with other sensors to
  maximize capability
• Method 21 compliant

TRANSFORMER TESTING

• Determine transformer health by sampling head space
• Measure Hydrogen (and other flammable gases) and
  Oxygen in nitrogen blanket
• Increasing flammable gas levels in head space
  indicates failing transformer

LANDFILL MONITORING

• LEL / PPM and 0-100% volume Methane
• 0-60% Carbon Dioxide range
• Can be combined with other sensors
  (O2/H2S/CO) to maximize capability

RKI Instruments, Inc.

Accessories

A. Calibration station

B. Battery charger / continuous operation function

C. Variety of sample hose lengths

D. Float probe, auto shut off when probe contacts water

E. PID service kits

F. Calibration kits

G. Carrying cases

H Rechargeable Ni-MH batteries

B.

EAGLE 2 CHARGER XX-XXXX
HARDING PART HW04DV-RKI

1018 Rev.5 5

AC

DC

C.

D.

E.

F.

G.

A.

EAGLE 2

SDM-E2 Calibration Station

RKI

Made in USA

RKI INSTRUMENTS

10000363   UL REGISTERED FIRM   ISO 9001

User Selectable Options

Date and Time	Data Log Overwrite
Date Format	Data Log Memory
Battery Type	LCD Contrast
Configuring Channels	Calibration Reminder
Combustible Gas Selection	Calibration Past Due Action
Catalytic Detection Units	Calibration Interval
Relative Response On or Off	Leak Check / Bar Hole Mode
Alarm Points	Bar Hole Measurement Time
Alarm Latching	Operation Confirmation Alert
Alarm Silence	Password Function On or Off
User and Station ID	Factory Default
Autocal Values	Lunch Break
Backlight Delay	Language
Auto Fresh Air	Span Factor
Data Log Interval	

Authorized Distributor:

World Leader In Gas Detection & Sensor Technology