

# The First Responder



*Leak Survey*



*Make Safe*



*Fitting Leaks - Semi-Conductor*



*Bar Testing LEL - % Gas*



*Appliance Testing*



*Ambient CO - Flue Test*

The **First Responder** is a combination instrument for first call and emergency response technicians in the gas utilities. It can also be used as a Combustible Gas Indicator with LEL and % Volume ranges for leak detection and general safety monitoring. The First Responder features a parts per million (PPM) range for increased sensitivity and rapid response to smaller leaks such as fitting leaks. Additionally, the First Responder has a Carbon Monoxide range for internal atmosphere monitoring where odor call response is required.

All ranges have aspirated samples from an internal pump controlled by the user. In addition, an External diffusion probe is supplied with a high-speed sensor to

enable rapid response to small fitting leaks. The probe will also respond to Carbon Monoxide, thus providing dual protection.

The high-speed response and sensitivity enable initial external leakage surveys to be performed immediately in the vicinity of property or pipelines, ensuring that distribution leaks are found quickly.

The First Responder is equipped with both audible and visual alarms and Ticker indications on the sensitive ranges. The First Responder truly combines in one unit all the essential elements that a gas utility first call technician would require in a gas detector.

# First Responder Specifications

## Operating Ranges

<u>Gas Range</u>	<u>Range</u>	<u>Resolution</u>	<u>Zero Stability</u>	<u>Accuracy</u>
EXT (external semi-conductor)	0 to 1000 PPM 1000 to 9999 PPM	1 PPM 10 PPM	5%	Typically 20%
PPM (catalytic)	0 to 1000 PPM	5 PPM	+/- 30 PPM	5% of reading +/- 25 PPM
LEL (catalytic)	0-100.0%	0.1% 1%	+/-0.5% N/A	2% of reading +/-1% LEL
Volume Gas (thermal conductivity)	0 to 100%	1%	+/-2%	1% of reading +/-1% Gas
Carbon Monoxide (electro-chemical)	0 to 1000 PPM	1 PPM CO	+/-15 PPM	5% of reading +/-15 PPM

**Alarms:** Instantaneous – LEL and CO  
Geiger Indication – PPM and EXT

**Data Logging:** Automatic and Manual

**Batteries:** 4 Alkaline D cell or Rechargeable

**Filters:** Cotton particulate and hydrophobic

**Note:** All the values above are at normal temperature and pressure. Humidity is between 0% and 95% RH (non-condensing). Pressure changes at the inlet and exhaust are minimized as they may cause transient changes in reading.

**Size:** 7.08" (180mm) x 3.74" (95mm) x 4.13" (105mm)

**Weight:** 3.75 lbs (1.7kg) with alkaline batteries

**Operating Temperatures:** -4 °F to 122 °F (-20 °C to 50 °C)

**Humidity:** 0-95% RH

**Construction:** Molded polypropylene case protected to IP54

**Display:** LCD containing analog display scale 0-100; 0-1,000; 0-10,000  
4 digit digital display  
3 character range indication  
Operational flags

**Sampling System:** Semi-conductor Sensor Probe connected to instrument with electrical harness or Standard Probe and Handle assembly using instrument integral pump with flow fail sensor. The sample path is protected by hydrophobic filter and automatic pump switch off.

**Power Source:** 4 "D" size Alkaline cells providing approximately 18 hours runtime (12 hours runtime with external semi-conductor sensor probe connected) at 68 °F. Rechargeable (NiCd) battery pack giving in excess of 8 hours runtime at 68 °F.



*Heath Consultants Incorporated operates under a continual product improvement program and reserves the right to make improvements and/or changes without prior notification.*



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