Gas Leak Detector
Model 21070

The Model 21070 Gas Leak Detector easily and quickly pinpoints gas leaks emitting from pressurized systems. Utilizing a thermal conductivity detector, the instrument responds to any gas mixture with a thermal conductivity different from that of air.

Helium leaks of $1 \times 10^{-5}$ cc/sec are easily detected, as are many others such as refrigerant leaks of $1.1 \times 10^{-4}$ cc/sec and argon leaks of $1.0 \times 10^{-4}$ cc/sec to name a few.

**CAUTION:** The Model 21070 (and 21072) is **NOT** designed to be used to determine leaks of combustible gases. This leak detector uses air as its reference and is designed to determine low level leaks of any gas having a thermal conductivity different from that of air, therefore, it is not specific to any gas or vapor. A combustible gas detector should be used for the determination of combustible gas leaks in possible hazardous conditions.

**Benefits/Features**
- Easy to operate — just turn it on, zero and then probe for leaks
- Precision instrument with high sensitivity
- User-selectable hi/low sensitivity settings
- Flash memory for saving various settings including alarm mode, setpoint and volume, peak hold delay, LED brightness, sensitivity, and pump speed
- Miniature probe pinpoints exact leaks
- No messy soap solutions
- No system contamination
- Can be tested to NIST-traceable standards
- Optional carrying case is available

**Industrial Applications**
- Testing and quality control
- Valves and manifolds
- Welds, seams, joints
- Pressure regulators
- Compression fittings
- High-pressure vessels and gas lines
- Refrigeration and air conditioning

**Laboratory Applications**
- Gas chromatographs
- Purge and trap systems
- Injection ports/septa
- Column and detector fittings
- Gas purifiers and traps
- Mass flow controllers
- Cylinder connections
- Tube fittings

**Specifications**
- **Detector:** Thermal conductivity cell with thermistors
- **Operational Temperature:** 70°F ±20°F (21°C ±11°C)
- **Visual Readout:** LED bar graph featuring adjustable brightness and peak hold with settable duration
- **Pump:** Diaphragm type and pump speed control
- **Line Voltage:**
  - Model 21070: 115 V, 60 Hz, 4W
  - Model 21072: 230 V, 50 Hz, 4W
- **Battery:** Rechargeable Ni-Cd, 7.36 V, 800 mAh

**Battery Life:**
- 7 to 8 hours
- Recharged to 95% of capacity in one hour
- Low battery indicator
- Very low battery shutdown

**Ranges:**
- Low: x1
- High: x100
- Adjustable sensitivity for low and high ranges
- Time constant/average
- **Zero:** Manual with drift elimination
- **Audio Signal:** Audible alarm with adjustable setpoint and volume

**Features:**
- Flash memory for saving settings
- Microprocessor controlled

**Dimensions:**
- 5.25" L X 3.25" W X 1.81" H (13.34 cm X 8.26 cm X 4.6 cm)

**Weight:**
- Instrument: 1.05 lbs. (0.48 kg)
- Charger: 0.61 lbs. (0.28 kg)

**Sensitivity**
- Minimum leak rate required to produce 10% deflection of full scale.
- **Argon:** $1.0 \times 10^{-4}$ cc/sec | 0.110 ft³/yr
- **Carbon Dioxide:** $1.1 \times 10^{-4}$ cc/sec | 0.123 ft³/yr
- **Helium:** $1.0 \times 10^{-5}$ cc/sec | 0.012 ft³/yr
- **Refrigerant:** $1.1 \times 10^{-4}$ cc/sec | 0.123 ft³/yr

**Ordering Information**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>Q21070</td>
<td>115V mini gas leak detector</td>
</tr>
<tr>
<td>Q21072</td>
<td>230V mini gas leak detector</td>
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**Options:** Carrying Case Model Q59-050. Testing to a NIST-traceable standard — contact your Air Liquide representative for more information.