

3M Occupational Health and Environmental Safety Division  
3M™ Single Gas Detector 450 Series

# Compact Safety



The 3M™ Single Gas Detector 450 Series is a low-maintenance portable single-gas pocket detector that delivers time and time again. Its compact size, reliability, and flexibility with ten detector options make the 450 Single Gas Detector a smart choice.

**3M**

## Built Tough

Rubber boot helps absorb everyday impact and protects internal components from contaminants.

## Superior Warranty

Completely refined inside and out, the 450 Single Gas Detector carries a standard two-year warranty on electronics and sensors CO, H<sub>2</sub>S, O<sub>2</sub>; one year on toxic sensors.

## Simple, Informative Display

High contrast numerical level display, high intensity LED alarm warning indication, and 85 dBA audible alarm indicate when the target gas reaches alarm set points.

SPECIFICATIONS	
<b>Readings</b>	High contrast numerical level-display and high intensity LED alarm warning indication and 85dBA audible alarm
<b>Dimensions</b>	3.65" x 1.7" x 1.1" (9.3 x 4.3 x 2.8 cm)
<b>Weight</b>	5.5 oz (156 g)
<b>Battery Life</b>	18 months (non-alarming)
<b>Special Features</b>	Convenient dual zero and span adjustment for calibration at alarm point for toxic gases (or 20.9% Oxygen) Optional Vibrator (455 model)
<b>Sensor Type</b>	Electrochemical
<b>Hazardous Area Rating</b>	CSA-Intrinsically safe—Class 1, Division 1, Groups A, B, C, D
<b>Warranty</b>	2 years standard on electronics and sensors CO, H <sub>2</sub> S, O <sub>2</sub> ; 1 year on toxic sensors

### GAS SENSOR OPTIONS

Sensor	Alarm Level	Range	Temp. Range	RH Range (non-condensing)
<b>Oxygen</b>	19.5%	0 – 30%	-4 to 122 °F (-20 to 50 °C)	15 – 90%
<b>Carbon Monoxide</b>	25 ppm or 35 ppm	0 – 900 ppm	-4 to 122 °F (-20 to 50 °C)	15 – 90%
<b>Hydrogen Sulfide</b>	10 ppm	0 – 500 ppm	-4 to 122 °F (-20 to 50 °C)	15 – 90%
<b>Chlorine</b>	0.5 ppm	0 – 90 ppm	-4 to 122 °F (-20 to 50 °C)	15 – 90%
<b>Ammonia</b>	25 ppm	0 – 200 ppm	-4 to 122 °F (-20 to 50 °C)	15 – 90%
<b>Sulfur Dioxide</b>	2 ppm	0 – 90 ppm	-4 to 122 °F (-20 to 50 °C)	15 – 90%
<b>Nitrogen Dioxide</b>	1 ppm	0 – 90 ppm	-4 to 122 °F (-20 to 50 °C)	15 – 90%
<b>Nitric Oxide</b>	25 ppm	0 – 200 ppm	-4 to 122 °F (-20 to 50 °C)	15 – 90%
<b>Hydrogen</b>	100 ppm	0 – 900 ppm	-4 to 122 °F (-20 to 50 °C)	15 – 90%

### 450 Series Single Gas Detectors

<b>450-450-100</b>	450 for OX - Oxygen
<b>450-450-101</b>	450 for CO-Carbon Monoxide, 35 PPM Alarm Set Point
<b>450-450-101-025</b>	450 for CO Carbon Monoxide, 25 PPM Alarm Set Point
<b>450-450-102</b>	450 for HS - Hydrogen Sulfide
<b>450-450-103</b>	450 for CL - Chlorine
<b>450-450-104-A</b>	450 for AM - Ammonia
<b>450-450-105</b>	450 for SO - Sulfur Dioxide
<b>450-450-107</b>	450 for ND - Nitrogen Dioxide
<b>450-450-108</b>	450 for HY - Hydrogen
<b>450-450-109</b>	450 for NO - Nitric Oxide

### 455 Series Single Gas Detectors (450 Series Detector with Vibratory Alarm)

<b>450-455-100</b>	455 for OX - Oxygen
<b>450-455-101</b>	455 for CO-Carbon Monoxide, 35 PPM Alarm Set Point
<b>450-455-101-025</b>	455 for CO Carbon Monoxide, 25 PPM Alarm Set Point
<b>450-455-102</b>	455 for HS - Hydrogen Sulfide
<b>450-455-103</b>	455 for CL - Chlorine
<b>450-455-104-A</b>	455 for AM - Ammonia
<b>450-455-105</b>	455 for SO - Sulfur Dioxide
<b>450-455-107</b>	455 for ND - Nitrogen Dioxide
<b>450-455-108</b>	455 for HY - Hydrogen
<b>450-455-109</b>	455 for NO - Nitric Oxide

\* Hydrogen Cyanide detector will be available in early 2008.

### ▲ WARNING

This instrument helps monitor for the presence and concentration level of certain specified airborne gases. Misuse may produce an inaccurate reading which means that higher levels of the gas being monitored may be present and could result in overexposure and cause sickness or death. For instruments with an oxygen sensor installed, misuse may produce an inaccurate reading where lower or higher levels of oxygen may be present and cause sickness or death.

Each person using this equipment must read and understand the information in the *User Instructions* before use. Use of this equipment by untrained or unqualified persons, or use that is not in accordance with the *User Instructions*, may adversely affect product performance and result in sickness or death. For proper use, see supervisor or *User Instructions*, or call 3M OH&ESD Technical Service in the U.S.A. at 1-800-243-4630. In Canada, call at 1-800-267-4414.



#### Occupational Health & Environmental Safety Division

3M Center – Building 235-0W-00  
St. Paul, MN 55144-1000  
www.3M.com/detection

#### Contact Information:

Sales Assistance: 1-800-328-1667  
Technical Assistance: 1-800-243-4630

#### 3M Canada

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PO Box 5757  
London, ON Canada N6A 4T1

#### Contact Information:

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