

# HAZMATCAD Plus™

## Hazardous Material Chemical Agent Detector



### PRODUCT HIGHLIGHTS

- **Compact, Lightweight, Handheld**
- **Fast Warm Up**
- **Nerve Blister & Select TIC Detection**
- **Dual Mode Operation**
  - **Fast Mode**
  - **High Sensitivity Mode**
- **Requires No Calibration**
- **Bump Test Accessory**
- **Data Log**

HAZMATCAD Plus™ is a multifunctional handheld instrument that detects and classifies chemical warfare agents Nerve (G), Blister (H) with an integral electrochemical sensor array for toxic industrial chemicals (TIC). When compared to other chemical agent multi threat detection technologies, HAZMATCAD Plus™ is designed to be reliable, fast to start up, easy to operate and is designed to avoid false alarms from non-target chemicals in the urban environment. The HAZMATCAD Plus™ uses both a Surface Acoustic Wave (SAW) array detector and electrochemical sensor array as its method of detection. The HAZMATCAD Plus™ offers two modes of operation, one for general operation and one high sensitivity, lowering the alarm threshold by approximately 10 times the fast response level. The electrochemical array operates on a real-time basis reporting detection alarms for blood (AC), choke (CG), hydride (HYdR) and halogen (HALO) gases at ppm levels.

### Nerve and Blister Detection

The SAW array detector is used to detect nerve and blister and it offers two key performance advantages over other commonly used technologies. Identification is accomplished by using a multi-element sensor array which creates a specific finger print or pattern of the chemical response. This analysis of the response pattern allows the HAZMATCAD Plus™ to be highly specific for the detection of nerve and blister agents. Additionally, the HAZMATCAD Plus™ uses an innovative collector that defines the sample suppressing non-target and enriching the target chemical agents. This combination of the sensor collector and array allows for its unmatched chemical specificity for nerve and blister detection.

### Toxic Industrial Chemical Detection

The HAZMATCAD Plus™ electrochemical sensor array is used to detect toxic industrial chemicals threats. These sensors are used

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for class identification by utilizing the semi specific nature of the sensors by exploiting similar physical properties of the chemicals.

## Operational Deployment

Designed to be used while wearing a Level A protection suit the HAZMATCAD Plus™ is simple to operate. After inserting the rechargeable batteries, a single key press starts the automatic sample cycle. Alarm detection appears as a message on the LED display and sounds audible an alarm. The alarm message reports both the concentration level "High", "Medium" and "Low" and the

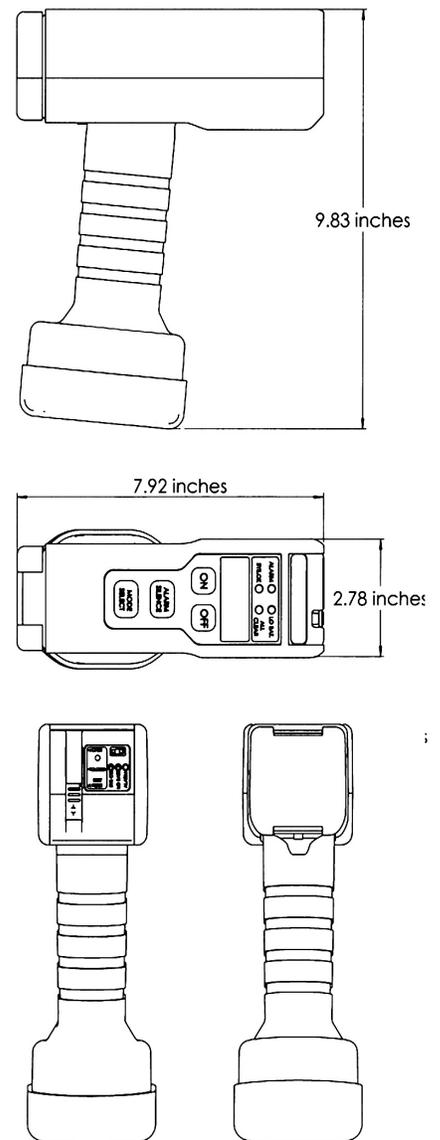
agent type "G" Nerve or "H" Blister. The electrochemical sensor array will report either "BLoD" blood agent (AC), "CHOK" choking (CG) agent, "HALO" halogen and "HYdR" hydride with the same concentration levels, "High", "Medium" and "Low".

HAZMATCAD Plus™ is lightweight instrument (50 oz), designed to be operated using the handle and uses a high visibility display which can be read in direct sunlight. HAZMATCAD Plus™ was created to meet the needs of first responders offering an easy to operate instrument that delivers highest reliability and detection performance without compromise.

## GENERAL SPECIFICATIONS

<b>Weight</b>	1.43Kg or 50 oz (including batteries)
<b>Dimensions</b>	5.8x20.0x24.9 cm or 2.3x7.9x9.8 inches
<b>Warm up</b>	<3 Minutes
<b>CW Agents Detected</b>	VX, GA, GB, GD, HD, HN3, AC, CG, Halogens and Hydrides
<b>Alarm Levels Nerve</b>	
<b>Fast Mode</b>	0.3 to 0.9 mg/m <sup>3</sup> or 0.04 to 0.14 ppm
<b>High Sensitivity Mode</b>	0.06 to 0.18 mg/m <sup>3</sup> or 0.01 to 0.03 ppm
<b>Alarm Levels Blister</b>	
<b>Fast Mode</b>	1.4 mg/m <sup>3</sup> or 0.2 ppm
<b>High Sensitivity Mode</b>	0.28 mg/m <sup>3</sup> to 0.04 ppm
<b>Alarm Level Toxic Industrial Chemicals</b>	
<b>Hydrogen Cyanide (AC)</b>	5.0ppm
<b>Phosgene (CG)</b>	0.3ppm
<b>Halogens</b>	10.0ppm
<b>Hydrides</b>	0.5ppm
<b>Battery Type</b>	Li Ion
<b>Mission Life</b>	
<b>Fast Mode</b>	8 hours
<b>High Sensitivity Mode</b>	12 hours
<b>Audible Alarm</b>	85dB at 0.1 m
<b>Operating Temperature</b>	0° to 40°C or 32° to 105°F
<b>Operating Humidity</b>	0-95% non-condensing atmosphere
<b>Warranty</b>	1 year parts and labor

## DIMENSIONS



## ORDERING INFORMATION

<b>HAZMATCAD Plus</b>	
<b>M1001060</b>	Detects Nerve, Blister and Select Toxic Industrial Chemicals