

HYDROGEN
GAS DETECTION
& VENTILATION
CONTROLS

# PROTECT LIFE & PROPERTY

FOR BATTERY STORAGE & CHARGING APPLICTIONS



### **ONE CONTROLLER FITS ALL**

- ✓ Off The Shelf Way To Meet NFPA Code
- ✓ Four Outputs For Pre-Alarm & Alarm
- √ 0-10V Output For BMS or Fan Control
- ✓ Strobe Alarm Outputs
- √ Various Gases Detectors Available
- ✓ Control Up To 16 Gas Detectors

#### **DESCRIPTION**

The MerlinGuard is a gas detection panel designed by Canadian Gas Safety (CGS) to be used with CGSHTFT detectors. It is intended for use in spaces that require gas detection, this solution is specifically hydrogen detection and provides features such as fan control options, alarm damper control, and connectivity to Building Management Systems (BMS).

The panel has four output options for pre-alarm and high-alarm conditions, and it also contains a 0-10V output that can be utilized by the BMS or for fan control via VFD. The MerlinGuard is a compact and versatile solution for gas detection for various applications, providing comprehensive features to meet the requirements and guidelines for hydrogen.

### **PROVIDING SAFETY & CONTROLS IN**

- SCIENCE LABORATORIES BOILER ROOMS GAS FEATURES







#### **FIND OUT MORE**

info@canadiangassafety.com 647-577-1500



## **Gas Detectors Available**





NO<sub>2</sub>

C<sub>3</sub>H<sub>8</sub>

Carbon Monoxide

Carbon Dioxide

Hydrogen

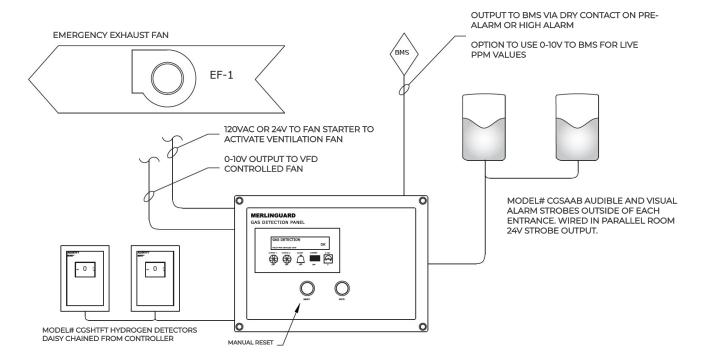
Oxygen Depletion/ Oxygen Enrichment Nitrogen Dioxide

LPG / Propane Natural Gas / Methane

Refrigerant

R-1234yf, R-1234ze, R-134a, R32, R-404a, R-407c, R-410a, R-454a, R-454b, R-454C, R-455a

# **Example Setups**



# IFC 608.6.1 Code Requirement Summary

"The ventilation system shall be designed to limit the maximum concentration of hydrogen to 1% (25%LEL) of the total volume of the room" or "continuous ventilation shall be provided at a rate of not less than 1 cfm per square foot of floor area in the room".

When using CGS Hydrogen detectors in conjunction with the MerlinGuard, triggering exhaust fans will prevent the potentially hazardous accumulation of explosive hydrogen gas concentrations if the levels rise to dangerous pre-set alarm levels. Not only does adding hydrogen detection provide essential life & property safety, the MerlinGuard will also provide significant energy savings by activating the exhaust fan solely when needed, potentially saving your company thousands of dollars annually, given that continuous ventilation can lead to substantial costs.

Each circuit board is permanently encased in robust polyac, providing enduring protection for electronic components. The sensor is safeguarded by a specially vented, chemical-resistant polycarbonate enclosure, shielding it from accidental damage.

#### **PROVIDING SAFETY & CONTROLS IN**

- SCIENCE LABORATORIES BOILER ROOMS
- COMMERCIAL KITCHENS PARKING GARAGES EMS STATIONS

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