



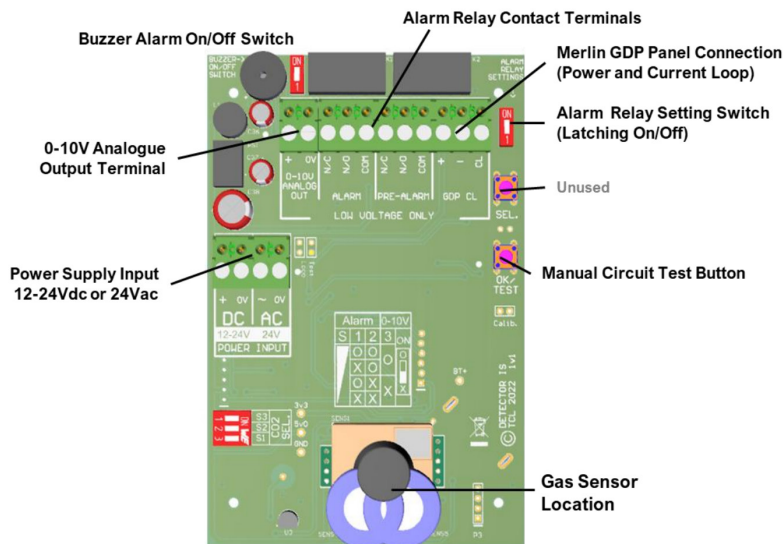
## Features

- 24VDC Power Input
- Traffic Light Indicator Display Changes Color Dependent On Gas Levels
- Modern & Compact Design
- Plug & Play Installation
- Standalone Detector or Used with a CGS Controller
- Alarm Relay Dry Contact
- In-Built Audible Alarm
- BMS/BAS Communications

## Product Overview

The iS range of CGS detectors work in combination with the CGS Merlin range of Gas Detection panels and Utility Controllers or can be used as a standalone detector. The CGSCOiS features an electrochemical sensor for industrial and commercial indoor applications. Compact, modern, digital design makes the units aesthetically pleasing and easy to install.

## Circuit board Diagram

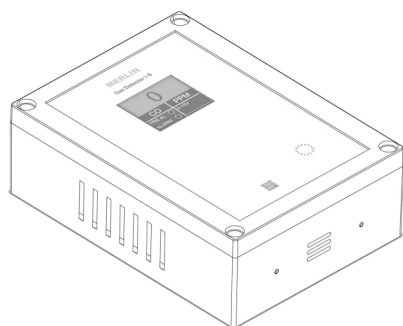


## Popular Applications



## Technical Specifications

| General                        |                        |                                                                                     |                |                |                                 |          |                 |
|--------------------------------|------------------------|-------------------------------------------------------------------------------------|----------------|----------------|---------------------------------|----------|-----------------|
| Model:                         |                        | Detector i-S                                                                        |                |                |                                 |          |                 |
| Target Gas                     |                        | H                                                                                   |                |                |                                 |          |                 |
| Size: (H x W x D)              |                        | 5.95 x 4.37 x 1.97" (151 x 111 x 50mm)                                              |                |                |                                 |          |                 |
| Housing Material:              |                        | ABS PA765. Flame Retardant UL 94V-1                                                 |                |                |                                 |          |                 |
| Mounting:                      |                        | Safe Zone - Indoor use - Wall Mounted                                               |                |                |                                 |          |                 |
| Weight:                        |                        | 212g                                                                                |                |                |                                 |          |                 |
| User Interface                 |                        |                                                                                     |                |                |                                 |          |                 |
| Display:                       |                        | 1.8" TFT                                                                            |                |                |                                 |          |                 |
| Screen Brightness:             |                        | Non-Adjustable                                                                      |                |                |                                 |          |                 |
| Visual Indicators:             |                        | Gas Level (Green: Normal; Yellow: Pre-Alarm; Red: Alarm) 0-10V Output: Relay Output |                |                |                                 |          |                 |
| Audible Alarm:                 |                        | >65dB @ 3.28ft (1m). Quiet conditions.                                              |                |                |                                 |          |                 |
| Language:                      |                        | English                                                                             |                |                |                                 |          |                 |
| Power Supply                   |                        |                                                                                     |                |                |                                 |          |                 |
| Max. Power Consumption:        |                        | 1.8W                                                                                |                |                |                                 |          |                 |
| Power Rating:                  |                        | 12-24V AC or DC                                                                     |                |                |                                 |          |                 |
| Relays                         |                        |                                                                                     |                |                |                                 |          |                 |
| Volt Free BMS relay outputs:   |                        | 1A switching current (resistive load) @ 24V AC/DC                                   |                |                |                                 |          |                 |
| Environmental                  |                        |                                                                                     |                |                |                                 |          |                 |
| Ingress Protection (IP):       |                        | Not Formally Evaluated                                                              |                |                |                                 |          |                 |
| Operating:                     |                        | -10 ~ 50°C / 14 ~ 122°F / 20 ~ 90% RH (non-condensing)                              |                |                |                                 |          |                 |
| Storage:                       |                        | 0 ~ 50°C / 32 ~ 122°F / 30 - 80% RH (no condensation)                               |                |                |                                 |          |                 |
| Altitude Rating:               |                        | 2000m                                                                               |                |                |                                 |          |                 |
| Wiring                         |                        |                                                                                     |                |                |                                 |          |                 |
| Typical                        |                        | Min. 2.5mm2 / 75°C min / Tinned copper.                                             |                |                |                                 |          |                 |
| Approvals                      |                        |                                                                                     |                |                |                                 |          |                 |
| Electrical Safety              |                        | BS EN 61010-1:2010 +A1:2019.                                                        |                |                |                                 |          |                 |
| Electromagnetic Compatibility  |                        | BS EN 50270.                                                                        |                |                |                                 |          |                 |
| Sensor Specification           |                        |                                                                                     |                |                |                                 |          |                 |
| Factory Calibration Conditions |                        | 25° ± 5°C - 77° ± 41°F (40-70% RH)                                                  |                |                |                                 |          |                 |
| Sensor Type                    |                        | Semiconductor                                                                       |                |                |                                 |          |                 |
| Gas Sensor                     | Measuring Range (%LEL) | Calibration Gas                                                                     | Response (T90) | Recovery (T10) | Alarm: 1<br>(Pre alarm warning) | Alarm: 2 | *EOL<br>(Years) |
| Hydrogen Gas                   | 0-10%                  | 10% LEL                                                                             | <30s           | <30s           | ▲8%LEL                          | ▲10%LEL  | 10              |



## Areas of coverage

Consider the coverage required and function of the area. Emphasis should be placed on airflow patterns and correct placement, not perceived detecting ranges.

The CGSHiS monitor should be installed approximately 1ft from the ceiling.