AGS
AMERICAN GAS SAFETY

AGSCO2i Datasheet
Carbon Dioxide

MERLIN

Gas Detector i

- Power
- Low
- High
- Sensor Life Exceeded

24VAC or DC Power Input

Standalone Detector or Used with an AGS Controller

LED Status Indication Display Changes Color

BMS/BAS Communications

Modern & Compact Design
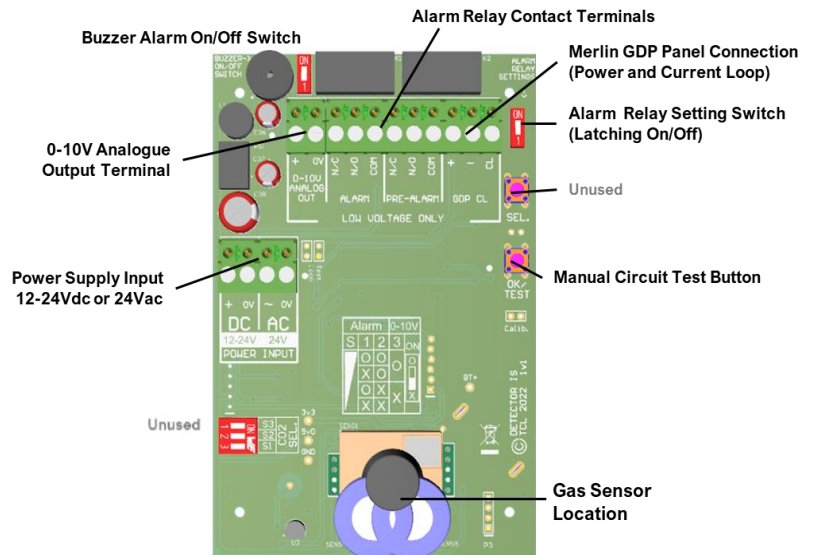
Alarm Relay Dry Contact

Plug & Play Installation
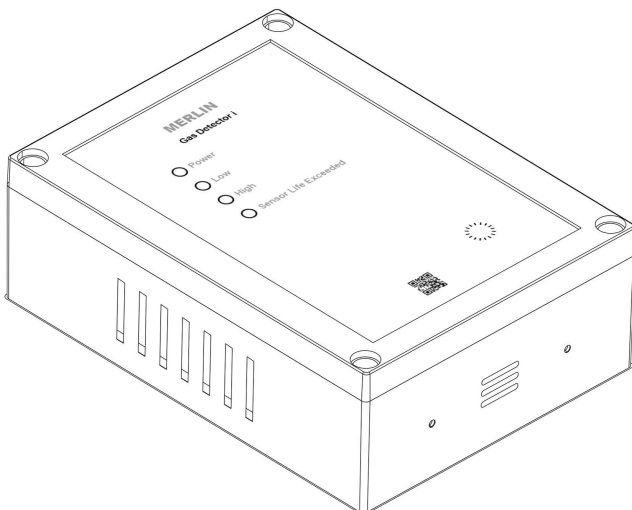
In-Built Audible Alarm

Product Overview

The i range of AGS detectors work in combination with the AGS Merlin range of Gas Detection panels and Utility Controllers or can be used as a standalone detector. The AGSCO2i features an NDIR sensor for industrial and commercial indoor applications. Compact, modern, digital design makes the units aesthetically pleasing and easy to install.

Popular Applications

Buzzer Alarm On/Off Switch

Alarm Relay Contact Terminals

Merlin GDP Panel Connection (Power and Current Loop)

0-10V Analogue Output Terminal

Alarm Relay Setting Switch (Latching On/Off)

Unused

Power Supply Input 12-24Vdc or 24Vac

Manual Circuit Test Button

Unused

Gas Sensor Location

Technical Specification

General

Product:	Merlin Detector i
Models (Target Gas):	Carbon Dioxide (CO2)
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:	N/A
Screen Brightness:	N/A
Visual Indicators:	Power (Green) Low Alarm (Yellow) High Alarm (Red) EOL (Yellow)
Audible Alarm:	>65dB @ 3.28ft (1m). Quiet conditions.
Language:	English

Power Supply

Rated Power:	1.8W Max
Rated Voltage:	12-24Vdc or 24Vac

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.

Compliance

Electrical Safety & EMC	CE / UKCA BS EN 61010-1:2010 +A1:2019. & BS EN 50270.

Sensor Specification

Gas Sensor	Measuring Range	Steps	Response (t90)	Recovery (t10)	Pre-Alarm:	Alarm:	*EOL (Years)
NDIR. Intelligent Infrared CO2 Module. ABC Logic Auto Calibration							
Carbon Dioxide (CO_2) **(Default Setting)**	0-5000ppm	1	<50s	<60s	▲800ppm	▲1000ppm	10

Area 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 AGSCO2i monitor should be installed approximately 5ft 6 inch from the ground level.

Find out more

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