## CGSO2TFT Datasheet <br> Oxygen Depletion/ Enrichment Gas Detector



Detector Should Be Used With An CGS Controller

BMS/BAS
Communications
Indicator Display
Changes Color
Dependent On Gas
Levels


## Product Overview

The TFT range of CGS detectors work in combination with the CGS Merlin range of Gas Detection panels and Utility Controllers. The CGSO2TFT features an electrochemical sensor for industrial and commercial indoor applications. Compact, modern, digital design makes the units aesthetically pleasing and easy to install.

## Popular Applications



## Technical Specification

| General |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model: | Merlin Gas Detector TFT |  |  |  |  |  |
| Target Gases: | O2 |  |  |  |  |  |
| Size: (H x W x D | $5.51 \times 3.74 \times 1.18$ " ( $140 \times 95 \times 30 \mathrm{~mm}$ ) |  |  |  |  |  |
| Housing Material: | ABS Polylac - PA765 |  |  |  |  |  |
| Mounting: | Safe Zone - Indoor use - Wall Mounted |  |  |  |  |  |
| Weight: | Max. 1.77 oz (0.05kg) |  |  |  |  |  |
| User Interface |  |  |  |  |  |  |
| Display: | 1.8" TFT |  |  |  |  |  |
| Screen Brightness: | Non-Adjustable |  |  |  |  |  |
| Visual Indicators: | TFT visual. Green: Normal; Yellow: Pre-Alarm; Red: Alarm |  |  |  |  |  |
| Audible Alarm: | >70dB @ 3.28ft (1m). Quiet conditions. |  |  |  |  |  |
| Buttons: | None |  |  |  |  |  |
| Language: | English |  |  |  |  |  |
| Power Supply |  |  |  |  |  |  |
| Power Consumption: | 90mA Max @ 24vdc |  |  |  |  |  |
| DC Power: | 12-32 VDC - Nominal 24 VDC |  |  |  |  |  |
| Internal Fuse: | None |  |  |  |  |  |
| Equipment |  |  |  |  |  |  |
| Overvoltage Category: | III |  |  |  |  |  |
| Pollution Degree: | 3 |  |  |  |  |  |
| 1/O |  |  |  |  |  |  |
| Relay: | Volt Free (Normally Closed / Common / Normally Open) 1x 30vdc 2A (Non-Latching) |  |  |  |  |  |
| Environmental |  |  |  |  |  |  |
| Ingress Protection: | Not Formally Evaluated |  |  |  |  |  |
| Operating: | $-10 \sim 50^{\circ} \mathrm{C} / 14 \sim 122^{\circ} \mathrm{F} 30 \sim 80 \% \mathrm{RH}$ (non-condensing) |  |  |  |  |  |
| Storage: | $-25 \sim 50^{\circ} \mathrm{C} /-13 \sim 122 \mathrm{~F}^{\circ}$ up to $95 \% \mathrm{RH}$ (non-condensing) |  |  |  |  |  |
| Altitude Rating: | 2000m |  |  |  |  |  |
| Wiring |  |  |  |  |  |  |
| Typical | \#15AWG Power Pair; \#18AWG Data Pair-Tinned copper. |  |  |  |  |  |
| Approvals |  |  |  |  |  |  |
| Electromagnetic Compatibility and Electrical Safety | BS/IEC/EN 61010-1 EMC EN 50270 |  |  |  |  |  |
| Other |  |  |  |  |  |  |
| Communication | RS485 MODBUS RTU |  |  |  |  |  |
| Gas Sensor $\quad \begin{gathered}\text { Indicating } \\ \text { Range }\end{gathered}$ | Steps | Response (t90) | $\begin{aligned} & \text { Recovery } \\ & \text { (t10) } \end{aligned}$ | Alarm: 1 <br> (Pre alarm warning) | Alarm: 2 | $\begin{aligned} & \text { *EOL } \\ & \text { (Years) } \end{aligned}$ |
| Oxygen ( $\mathrm{O}_{2}$ ) $0-30 \% \mathrm{~V} / \mathrm{V}$ | 0.1 | <30s | <60s | マ $19.5 \% \mathrm{~V} / \mathrm{V}$ | 『 18.5\% V/V $\mathbf{\Delta} 23 \% \mathrm{~V} / \mathrm{V}$ | 2 |

## 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 target gas will only be identified when contact is made with the sensing element itself.

The CGSO2TFT monitor should be installed approximately 3-5ft from ground level.

Find out more
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