

# CellarGuard CO2 Monitoring System



## | Overview |

The Flamefast CellarGuard system is designed to monitor for a build-up of Carbon Dioxide in confined spaces. Cellars and other CO2 storage areas in premises such as Breweries, Public Houses and Fast Food Outlets present a risk as leaks from CO2 cylinders can quite often go unnoticed. If the areas are not properly ventilated, exposure to high concentrations of CO2 can have serious adverse effects on your health can lead to unconsciousness and in extreme cases can even be fatal.

Due to the quick and easy installation, built in audible alarm, visual indication and remote alarm beacons, the CellarGuard is the ideal safety solution to protect staff from CO2 poisoning in cellars.

The CellarGuard is supplied prewired with a standard three pin plug. It also comes complete with mounting brackets, fixtures, fittings, network cable, adapter (to connect to Remote Display) and an installation and operation manual.

## | Key Features |

- NDIR (Non-Dispersive Infrared) sensor
- Measures up to 50,000ppm
- Up to 3 Remote Display units
- Quick & easy installation
- LCD readout for CO2 and Temperature levels
- Relay output to control a fan to ventilate confined spaces
- Audible and Visual alarm indications
- IP54 enclosure

## Dimensions

	Main Controller	Remote Display
Height	168 mm	118 mm
Width	125 mm	85 mm
Depth	47 mm	34 mm

## External Device Interfaces

Alarm Output	NO Volt Free Contact (Alarm 1) Rated 230V 2A Max
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## Installer Selectable Options

- Temp Display in °C or °F
- Alarm Levels
  - o Alarm 1 0.5, 1, 1.5 or 2% (1.5% Default)
  - o Alarm 2 1.5, 2, 2.5, 3, 3.5 or 4% (3% Default)
- Sensor Calibration

## Basic Operation

The CellarGuard system has a main controller incorporating the CO2 & Temp sensors. This is to be mounted 450mm from the floor near to where CO2 is likely to build up, e.g. next to CO2 cylinders or manifolds.

Each main controller can be connected with up to 3 remote display units (one supplied with each system). These are connected to the main controller using an RJ45 cable (7m cable supplied). This acts as a repeater mimicking all alarms as well as CO2 and temp levels.

There is a normally open volt free contact (activated at alarm 1) to allow for control of a fan to ventilate the area in the event of a CO2 build up. This cable is pre-wired to help maintain the IP rating of the unit.

## Technical Specification

Power Supply	230VAC
CO2 Range (Selectable)	50,000ppm
CO2 Accuracy	±100ppm ±5% @ NTP
Annual Drift	<20ppm per Year @ 400ppm
Sensor Type	NDIR
Typical Sensor Life (CO2)	15 Years
Temperature Range	0°C to 50°C
Temperature Accuracy	±1°C @ 25 °C
Operating Conditions	0°C to 40°C 0 to 95% Humidity (NC)
Alarm Level	80dB @ 10cm
Warm-up Time	<60 seconds
Approval	CE

## Part Numbers & Options/Accessories

Part No	Description
CG-PO	CellarGuard System
CG-RDU	Additional Remote Display