

# STAND ALONE OXYGEN DEPLETION & TOXIC GAS DETECTOR/CONTROLLER

## AMPCONTROL LABS AND INDUSTRIAL CONTROLLERS

PRODUCT BROCHURE

### CMC-SA01 SERIES

#### PRODUCT DETAIL

- Single channel standalone detector and controller
- Choice of sensors
- Built-in long life sensor
- Specifically designed for laboratories and industrial applications
- Data logging function
- Built in large backlit display and smart beacon with buzzer
- Built in programmable relays and 1x linearised analog output
- Designed for easy installation and minimum maintenance during operation
- Highest performance at the lowest price



#### APPLICATION

- Oxygen depletion and toxic gas monitoring in confined spaces
- Oxygen depletion and toxic gas monitoring in food and beverage, pharmaceutical industries
- Oxygen depletion and toxic gas monitoring in residential and commercial buildings
- Oxygen depletion and toxic gas monitoring recreational facilities and shopping malls
- Oxygen depletion and toxic gas monitoring libraries and other indoor places
- Oxygen depletion and toxic gas monitoring in car repair workshops, loading docks and other places where air quality could possibly worsen

#### FEATURES

- Wall mount
- Long life electrochemical sensor, long term stability, and high accuracy
- Data logging
- Simple user calibration
- Analog output (4~20mA )
- Programmable volt free relay contacts
- Optional Modbus RS-485 communication
- Optional remote display
- Wide working voltage

## SPECIFICATIONS

### Oxygen Depletion and Toxic Gas Monitor and Controller

Target Gas	Please refer list of gases
Sensing Element	Electrochemical sensor
Gas Sample Mode	Natural diffusion
Warm Up Time	1hour (cold start)
Response Time (T90)	< 60 seconds
Signal Refresh Rate	1s
Measuring Range	Refer list of gases
Accuracy	<±5%FS (at 20±5°C/ 50±20%RH)
Sensor Life	2 years (subject to environmental variables and background gases)

### Electrical

Power Supply	90VAC- 265VAC 50/60Hz
Power Consumption	3W
Wiring Connections	Pre-wired supplied with 1m cable and Australian 3-pin plug

### Outputs

Analog Output	1x4~20mA linear
Relays	Two programmable relays, volt free relay contacts (1NO, 1 NC)
D/A Resolution	16 bit
Beacon/Sounder	Built in, RED flashing light with alarm sounder 100db @1m
Communication Interface	Modbus RS485 interface (optional)

### General Performance

Operation Temperature	0-50°C
Operation Humidity	15-95%RH, non-condensing
Storage Conditions	0-50°C
Net Weight	1kg depending upon the type of enclosure
Dimensions	180mm (W) × 335mm (H) × 100mm (D) (ABS enclosure)
Installation Method	Wall mount
Housing and IP Rating	Plastic enclosures: PC/ABS fire-retardant plastic, IP20

## MODEL SELECTION

MODEL	DESCRIPTION
IGD-L2200- XXX	Gas detector with built in LCD display, built in beacon and buzzer, analog 4-20mA output and two alarm relays
IGD-L2200C- XXX	Gas detector with built in LCD display, built in beacon and buzzer, Analog output, Modbus RS485 and two alarm relay

Target gas	Gas	Detection range	XXX code
Carbon Monoxide	CO	0 - 2000ppm	001
Hydrogen Sulfide	H <sub>2</sub> S	0 - 100ppm	002
Sulfur Dioxide	SO <sub>2</sub>	0 - 100ppm	003
Ammonia	NH <sub>3</sub>	0 - 200ppm	004
Nitric Oxide	NO	0 - 200ppm	005
Nitrogen Dioxide	NO <sub>2</sub>	0 - 200ppm	006
Chlorine	Cl <sub>2</sub>	0 - 20ppm	007
Ozone	O <sub>3</sub>	0 - 50ppm	008
Oxygen	O <sub>2</sub>	0 - 30%VOL	009
Formaldehyde	HCHO	0 - 100ppm	010
Hydrogen	H <sub>2</sub>	0 - 1000ppm	011