

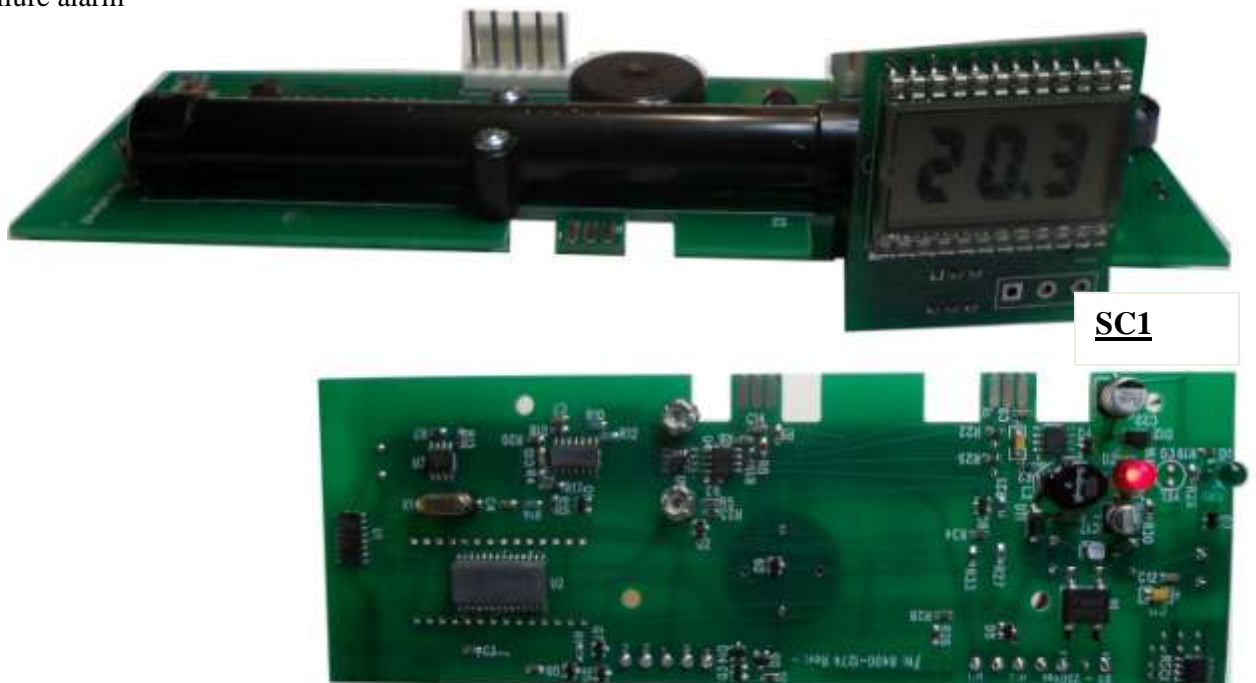
Sensor ($\pm 1.5\%$) and Control Board – SC1

Low cost, universal power O₂ sensor / Controller. Valve timing and voltage are configurable to user specification.

Operation: While measuring Oxygen Concentration, Pressure and flow valves are controlled and occluded outlet is detected.

Features:

- **IEC60601-1** compliant
- Concentration can be displayed on field attachable DigiDISP LCD
- Adjustable ON time
- 2 or 3 valve operation
- Outlet blockage (No Flow) alarm.
- Sensor and Control in One.
- DPST Power switch support
- No need for a battery
- Green / Yellow / Red LED's
- 92 DB Buzzer Alarm
- Yellow LED Valve ON indicators
- Power failure alarm



SC1

Specification:

Weight	50g
Power Supply	Universal 85 to 250Vac
Absolute maximum instantaneous Input Voltage	600V
Valves Power	2.5W 12 to 36 Vdc configurable to user specification
Valves Timing	Configurable to user specification
LCD Display	DigiDISP Connects to J2
O2 sensor Accuracy	±1.5%
Flow rate	0 to 35 LPM
O2 Range	Concentration: 20.8% - 96%
Max pressure	30 psig
Operating Temperature	-45 to 70°C
Survival Temperature	-85 to +85°C
Calibration Retention	More than 10 years
Temperature change response	1°C per Minute
Thermal Gradient _{max}	50 K/ meter
Calibration	Factory Calibration
Red LED	ON when Oxygen Concentration is below 85% for longer than 1.5 minutes Or when Outlet is occluded
Green LED	· Blinks every second during the 1 st 1.5 minutes of operation · ON if Oxygen Concentration is above 85%
Yellow LED	ON when Oxygen Concentration is below 85% and above 75%
Vb, Va, Vc LEDs	Are jointly ON / OFF with their respective valve
Valve ON Timing	Configurable to user specification
Buzzer Alarm	92 DB at 30cm , Turn ON conditions: 1. Power Failure. Alarm sounds every 7 seconds for 0.75 second for 30 minutes 2. Occluded concentrator outlet (No Flow Condition) 3. Oxygen Concentration remains below 85% for 15 minutes

Connectors

J1– Connects to Amp #770848-5, Valves' Control

Pin

1. (Square pad) Va(+)
2. Va,b,c (-)
3. Vb (+)
4. Va,b,c (-)
5. Vc (+)

J3– Connects to Amp #770848-7, Power

Pin

1. ~115/230Vac
2. N/C
3. ~115/230Vac
4. N/C
5. Power DPST switch NC (normally closed) contact 1
6. N/C
7. Power DPST switch NC (normally closed) contact 2

J2—Board Edge - Connects to DigiDISP or DigiCAL

Pin

1. 5V Regulated DC Power Supply (+)
2. Calibration pin. (Active Low)
3. Serial Clock
4. Serial Data
5. Serial Strobe
6. 5V Regulated DC Power Supply (-)

