

# Gasboard 8500FS-L240

## Ultrasonic 5-in-1 Oxygen and Flow Sensor

Gasboard-8500FS is Cubic's ultrasonic technology 5-in-1 combined solution for medical ventilators. It can measure flow rate, oxygen concentration, temperature and humidity in binary gases. The measured flow rate can be up to 240L/min. Gasboard-8500FS can be widely used for medical ventilators of expiratory, inspiratory or proximal demands.



### Features

- Ultrasonic measurement technology, for both oxygen concentration and flow rate.
- Based on principle of TOF (time of flight) measurement, continuous monitoring, no drift, no need routine calibration, maintenance-free.
- With built-in temperature and humidity sensor for full scale matrix temperature and humidity compensation.
- No-consuming parts, long life span.
- Pressure compensation is also available as option.

### Key Features



Oxygen Concentration  
Measurement



Large Air Flow Rate  
Up to 240L/min



Temperature Correction



Humidity Compensation

# Gasboard 8500FS-L240

## Ultrasonic 5-in-1 Oxygen and Flow Sensor

### Measurement

- O<sub>2</sub> Concentration: 0%~100%
- O<sub>2</sub> Flow Rate: 0~240L/min

### Accuracy

- O<sub>2</sub> Concentration:  
±2.5%FS@(10~40)°C;0~40%RH  
±3%FS @(5~45)°C;0~95%RH (Non-condensing)
- O<sub>2</sub> Flow Rate:  
±0.2L/min (<10L/min),  
±2.0% reading (≥10L/min)

### Resolution

- O<sub>2</sub> Concentration: 0.1%
- O<sub>2</sub> Flow Rate: 0.1L/min

### Response Time

- O<sub>2</sub> Concentration: <0.1s
- O<sub>2</sub> Flow Rate: <10ms

### Gas Supply

- PSA or Pure 100% Oxygen

### Power Supply

- Work Voltage:  
DC 4.75~12.6V, Ripple Wave≤50mV
- Work Current:  
Average Current<16mA; Peak Current≤35mA

### Communication

- UART\_TTL (3.3V)
- Analog Output :  
O<sub>2</sub> Concentration: 0.2~2.5V  
O<sub>2</sub> Flow Rate: 0.2~2.5V

### Environmental

- Work Condition:  
5~45°C; 0~95%RH(Non-condensing)
- Storage Condition:  
-20~70°C; 0~95%RH(Non-condensing)

### Life Span

- ≥15 Years

---

### Cubic Sensor and Instrument Co.,Ltd.

Add: Fenghuang No.3 Road, Fenghuang Industrial Park, Eastlake  
Hi-tech Development Zone, Wuhan, 430205, China  
Tel: +86-27-81628827 Fax: +86-27-87401159  
E-mail: info@gassensor.com.cn

