Senseair S8

Smart Temp Part Number: RS-CO2

Plug in CO2 sensor for Viking RS-SSD Smart Sensor



A very small, versatile and mass-producible CO_2 sensor module

More than 30 years experience of research and development within the field of infrared gas sensing has now brought us the smallest CO_2 sensor, with NDIR-technology, in the world – Senseair S8 Commercial. The new sensor has excellent performance such as high accuracy and low power consumption.

Senseair S8 Commercial is designed for high volume production with full traceability by sensor serial number on all manufacturing processes and key components. Every sensor is individually calibrated and is provided with UART digital interface. The sensor has an estimated life time of more than 15 years.

Senseair S8 Commercial is a module that is designed for simple integration into products. Senseair S8 Commercial can be used in a wide range of applications such as in ventilation control to improve energy savings and to ensure a good indoor climate. Other fields of use are personal safety and measurements to increase process yield and to increase economic value in biorelated processes.

Standard specification

Measured gas	Carbon dioxide (CO_2)
Operating Principle	Non-dispersive infrared (NDIR)
Measurement range CO_2	400–2000ppm
Accuracy CO_2	±30ppm ±3% of reading [1]
Maintenance	No maintenance required
Life Expectancy	> 15 years
Power supply	4.5–5.25VDC
Operation temperature range	0–50 °C
Communication	UART (Modbus)
Dimensions [mm]	33.9 x 19.8 x 8.7
Energy consumption	300mA peak 30mA average
Response time	2 minutes by 90%

Key benefits

- Miniature size
- Compliant with ANSI/ASHRAE Standard 62.1-2022
- Compliant with RESET grad B
- Compliant with WELL Building Standard® (WELL v2™)
- Individually calibrated
- Maintenance-free
- Long term stability
- Low power consumption

Note 1: Accuracy is specified over operating temperature range. Specification is referenced to certified calibration mixtures. Uncertainty of calibration gas mixtures (±1% currently) is to be added to the specified accuracy for absolute measurements.