

# Senseair S8 LP



## A very small, versatile and mass-producible CO<sub>2</sub> 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<sub>2</sub> sensor, with NDIR-technology, in the world – Senseair S8 LP. The new sensor has excellent performance such as high accuracy and low power consumption. Senseair S8 LP 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 is maintenance-free and has an estimated life time of more than 15 years.

Senseair S8 LP is a module that is designed for simple integration into products. Senseair S8 LP 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 bio-related processes.

## Standard specification

|                             |   |
|-----------------------------|---|
| Article number              | 004-0-0053  |
| Operating principle         | Non-dispersive infrared                                       |
| Measured gas                | Carbon dioxide (CO <sub>2</sub> )                             |
| Measurement range           | 400–10000ppm  |
| Accuracy                    | ±40ppm ±3% of reading   |
| Operating conditions        | 0–50 °C<br>0–85% RH   |
| Warm-up time                | < 60s   |
| Response time $\tau_{63\%}$ | ≤ 30s   |
| Power supply                | 4.5–5.25V   |
| Peak current                | 300mA   |
| Average current             | 18mA  |
| Communication               | UART (Modbus)   |
| Outputs                     | Digital   |
| Compliance                  | ANSI/ASHRAE 62.1-2022<br>RESET grade B<br>WELL v2™            |
| Maintenance                 | Maintenance free  |
| Life expectancy             | > 15 years  |
| Dimensions [mm]             | 33.9x19.8x8.7<br>with pin headers (optional)<br>33.9x19.8x9.3 |
| Weight                      | < 8g  |
| Storage conditions          | -40–70 °C   |

## Key benefits

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

Disclaimer : Please refer to product specification for the complete technical details.

