## Senseair K33 ICB-F



## Sensor Module for bio applications

Senseair K33 ICB-F is targeted on bio applications with required measurement range 0 to up to 30%vol CO<sub>2</sub>.

Senseair K33 ICB-F can be supplied in diffusion modification with or without (Senseair K33 ICB) tube IN/ OUT. The module is as all other sensors from Senseair 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.

This platform is designed to be a low power OEM module for integration into host apparatus, such as battery operated products and sensors with radio transmitters. Any application where power consumption is important to keep at a minimum without sacrificing the performance.

## **Standard specification**

| Measured gas             | Carbon dioxide (CO <sub>2</sub> )        |
|--------------------------|--|
| Operating principle      | Non-dispersive infrared (NDIR)           |
| Measurement range        | 0 – 30% <sub>vol</sub>                   |
| Accuracy                 | ±0.5% <sub>vol</sub> CO <sub>2</sub>     |
|                          | ±3% of measured value                    |
| Dimensions (L x W x H)   | 51 x 57x 14 mm                           |
| Life expectancy          | >15 years                                |
| Operation temp. range    | 0 – 50 °C                                |
| Operation humidity range | 0 – 95% RH (non-condensing)              |
| Power supply             | 5 – 14 V DC max rating,                  |
|                          | stabilised to within 10%                 |
|                          | (on board protection circuits)           |
| Power consumption        | 40 mA average                            |
|                          | <200 mA average during                   |
|                          | IR lamp ON (120 ms)                      |
|                          | <250 mA peak power during                |
|                          | IR lamp start-up (the first 50 ms)       |
| Communication            | I <sup>2</sup> C. UART (Modbus protocol) |

## Key benefits

- Low-power consumption
- Individually calibrated
- High quality
- Long term stability





