

# Senseair K33 ELG

## Sensor module for environment parameters logging

Senseair K33 ELG is a sensor module for CO<sub>2</sub> concentration, temperature and relative humidity.

Senseair K33 ELG is designed for low-power application with demand for multiple measurement parameters. The adjustable measurement interval, results in average current that can be reduced to less than 52 µA (one measurement every 60 minutes).

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 CO <sub>2</sub> | 0 – 5000 ppm                      |
| Measurement range temp            | -30 – 60 °C                       |
| Measurement range RH              | 0 – 100%                          |
| Accuracy                          | ±30 ppm ±3% of measured value     |
| Dimensions (L x W x H)            | 57.15 x 50.80 x 11.80 mm          |
| Life expectancy                   | >10 years                         |
| Operation temp. range             | 0 – 50 °C                         |
| Operation humidity range          | 0 – 95% RH (non-condensing)       |
| Power supply                      |                                   |
| G+ referred to G0                 | 5.5 – 12 V DC max rating          |
| Vbat+ referred to G0              | 4.75 – 12 V DC max rating         |
| Peak current                      | <250 mA                           |
| Communication                     | I <sup>2</sup> C, UART (Modbus)   |

## Key benefits

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

