Senseair K30 FR



Fast Response CO2 Sensor Module

Senseair K30 FR sensor module optimised for fast response time. The sample cell is well protected by a particle filter and is designed for fast diffusion without any need for external pump. In addition, there is a tube inlet to be able to feed on-line test gas through the sensor.

The module 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.

Senseair K30 FR is designed for simple integration into products that requires a fast update rate of CO_2 measurement.

The sensor can be used in a wide range of applications where fast changes need to be detected, such as gas leakage in food and pharmaceutics packaging industry. Other uses are human occupancy detection and leakage detection in industry environments.

Standard specification

Measured gas Operating principle

Measurement range CO₂ OUT1 Linear Output OUT2 Linear Output OUT3 Digital Output

OUT4 Digital Output

Accuracy CO_2 Dimensions (L x W x H) Life expectancy Operating temperature range Operating humidity range

Power supply Current consumption Response time $_{_{T90}}$

Communication

Carbon dioxide (CO₂) Non-dispersive infrared (NDIR) 0-5000ppm 0-10VDC = 0-5000ppm0-5VDC = 0-5000ppm $On \ge 800ppm$ $Off \leq 700ppm$ $On \ge 1000ppm$ $Off \leq 900ppm$ ±30ppm ±3% of reading 51 x 57 x 14mm > 3 years 0-50 °C 0-95% RH (non-condensing) 4.5-14VDC 70mA (average) 2 seconds @ 0.5 l/min tube gas flow I²C, UART (Modbus)

Key benefits

- Fast response time
- Compliant with ANSI/ASHRAE Standard 62.1-2022
- Compliant with RESET grad B
- Compliant with WELL Building Standard[®] (WELL v2[™])
- Individually calibrated
- High quality
- · Long term stability





