

Wireless IoT Indoor Air Quality Monitor



Description:

The CO2 sensor is a high-quality optical sensor which uses the non-dispersive infrared (NDIR) method to measure the carbon dioxide (CO2) concentration in airconditioned buildings. In addition it also measures the temperature and relative humidity. The sensor combines all the necessary elements for effective climate control in commercial office buildings, hospitals, hotels, schools and other facilities.

CO2 monitoring is a very effective way for demand control ventilation (DCV) which allows a healthy and comfortable environment for the occupants.

For data communication the CO2 sensor is using the worldwide available wireless SIGFOX network. Due to the dual radio architecture it can also send data to the LoRaWAN network or a wireless MBus HAN network simultaneously.

Dashboards for visualization are available from many companies.

Features:

- Measured gas: Carbon Dioxide CO2
- Measurement range: 400 – 5000ppm
- Sensor Type: Non-dispersive infrared (NDIR)
- Accuracy (CO2): +/- 30ppm +/- 3% of reading
- Digital Temperature & Humidity Sensor
- Communication Network: SIGFOX 1 EMAEI
- Option SIGFOX ZONE 2,4 AMERICAS / APAC
- Worldwide Network Access via API
- Operating Frequency: 868.130 MHz
- Transmission Cycle: max. 6 / hour or less
- Option: Dual Radio Version
- Option: LoRaWAN, wireless Mbus, KNX
- Antennas: 2 internal for dual radio applications
- Dashboards: available
- Optical LED display: Limits acc. to DIN EN13779
- Operating Temperature Range: -20°C to +50°C
- Power Supply: external 5V DC / 24V DC
- Dimensions: 120 x 70 x 25 mm

Applications:

- Environmental Monitoring
- Air Quality Monitors
- Office buildings, schools, hospitals
- Demand Control Ventilation (DCV)
- Heating Ventilation Air Conditioning (HVAC)