

Technical Data Sheet: CO2 Digital Sensor



Application

Module and sensor used for monitoring CO2 concentration and Temperature.

General

- Dimensions of the sensor: 79.5 x 76.5 x 45.5 mm (3.1 x 3.0 x 1.8 in.)
- Length of the cable: 0.85 m (flat cable)
- Connector: connector with 4 gold-plated pins between sensor and wireless module
- Temperature measurement uncertainty: +/- 0.3°C without calibration and +/- 0.15°C after calibration at 37°C
- CO2 measurement uncertainty: +/-3% at 5% CO2 after calibration without calibration
- Resolution: 0.0625°C and 0.0025% CO2
- Calibration point: Calibration of sensor in comparison at +37°C and 5% CO2. Other points upon request.
- Sensor protection index: IP44

Wireless Technology

- Industrial Scientific Medical (ISM) band frequencies: 4 different bands available for worldwide use based on location
- Wireless Range: up to 700 meters (2,300 ft.) in open space, from 25 meters (82 ft.) to 100 meters (330 ft.) indoors, and up to 400 meters (1,312 ft.) indoors with 3 repeaters
- Wireless Power Output: 25mW (check with your sales representative for international product availability and radio signal strength)
- Data Verification: Use of error-correcting code and CRC (checksum) ensures data integrity

Sensor Information

- Sensor Types: digital sensor with 4 leads
- Measurement Range: CO2/Temperature range measured: 0°C to 50°C (32° to 122°F) and 0 to 9% CO2
- Sensor Dimensions: Internal
- Resolution: 0.0625°C and 0.0025% CO2
- Calibration Certificate: Downloadable certificate available with calibrated sensors

Memory

- Memory is shared between temp & CO2 therefore 1,500 per sensor totaling 3,000 in Memory
- Sampling rates: minimum every 3 minute to maximum every 24 hours

Alarm

- Smart-View Siren • Phone call • SMS Text • Email • Fax • Print
- Programming: Programmable high and low alarm limits with delay option; visual pre-alarm; visual and local audible settings for alarm limits
- Sensor Failure Protection: Spontaneous alarm emission for technical failures (sensor or receiver based); low battery alarm

Software

- Software Design: Cognitive ergonomic design to optimize user's work, reduce risk of error and provide additional system security
- Server/Client Relationship: Single server installation with unlimited client installation license agreement
- Scalability: Single software package manages all system sizes
- Report files require Microsoft* Word* and/or Excel* to handle data files exported in these formats

Standards and Regulations

- 915 MHz systems compliant with FCC Part 15 for non-interference with existing Wi-Fi network and other wireless devices

Environmental Conditions

- Module Protection Index: IP65
- Sensor Protection Index: IP44
- Ambient Condition Requirements: 0°C to 50°C (32°F to 122°F); 0 to 90% RH non-condensing

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