

EnOcean Equipment Profiles

REVISION HISTORY

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System Specification



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System Specification

D2-04: CO2, Humidity, Temperature, Day/Night and Autonomy

CO2 sensor with 8 bits resolution (0 – 2000ppm or 0-5000ppm range) 8 bits temperature and relative humidity with Day / Night and battery autonomy.

Day / Night is based on illumination not on clock

Data exchange

Direction: unidirectional

Addressing: broadcast

Communication trigger: time-triggered

Communication interval: According to remaining autonomy and day or night

Trigger event: heartbeat, ...

Teach-in method: Universal teach-in, Smart Ack

Encryption required: no

Security level format: 0

EEP Family Table

Each TYPE has to support every parameter that is marked in its column!

| TYPE | 0x00 | 0x01 | 0x02 | 0x03 | 0x04 | 0x05 | 0x06 | 0x07 | 0x08 | 0x09 | 0x10 | 0x1A | 0x1B | 0x1C | 0x1D | 0x1E |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| CO2 Sensor 0-2000 ppm range | X | X | X | X | X | X | X | X | - | - | - | - | - | - | - | - |
| CO2 Sensor 0-5000 ppm range | - | - | - | - | - | - | - | - | X | X | X | X | X | X | X | X |
| Humidity Sensor | X | X | - | - | - | - | - | - | X | X | - | - | - | - | - | - |
| Temperature Sensor | X | - | X | X | X | X | - | - | X | - | X | X | X | X | - | - |
| Day/Night Sensor | X | X | X | - | - | X | X | X | X | X | X | - | - | X | X | X |
| Battery Autonomy | X | X | X | X | - | - | - | X | X | X | X | X | - | - | - | X |

| | | |
|-------------|----|--|
| RORG | D2 | VLD Telegram |
| FUNC | 04 | CO2, Humidity, Temperature, Day/Night and Autonomy |
| TYPE | 09 | Type 0x09 (description: see table) |

Submitter: NanoSense

The manufacturer will indicate emission rates versus battery autonomy and day night status.

| Offset | Size | Data | ShortCut | Description | Valid Range | Scale | Unit |
|--------|------|------------------|----------|--|---|--------------------|------|
| 0 | 8 | CO2 | CO2 | Concentration (linear), 1 LSB = 7.84 ppm Or Concentration (linear), 1 LSB = 19.6 ppm | 0...255 | 0...2000 (or 5000) | ppm |
| 8 | 8 | Humidity | HUM | Rel. Humidity (linear), 1 LSB = 0.5 % | 0...200 | 0...100 | % |
| 16 | 8 | Temperature | TMP | Temperature (linear), 1 LSB = 0.2 °C | 0...255 | 0...+51 | °C |
| 24 | 1 | Day/Night | DN | ... | Enum: 0: Day 1: Night | | |
| 25 | 3 | Battery autonomy | BA | Battery autonomy | Enum: 0: 100 - 87.5 % 1: 87.5 - 75 % 2: 75 - 62.5 % 3: 62.5 - 50 % 4: 50 - 37.5 % 5: 37.5 - 25 % 6: 25 - 12.5 % 7: 12.5 - 0 % | | |
| 28 | 4 | Not Used (= 0) | | | | | |