

EnOcean Equipment Profiles

REVISION HISTORY

Ver.	Editor	Change	Date
2.6.8	NM	Last xml edition of the EEP-Specification	Dec 31, 2017

Copyright © EnOcean Alliance Inc. (2019). All rights reserved.

The information within this document is the property of the EnOcean Alliance and its use and disclosure are restricted. Elements of the EnOcean Alliance specifications may also be subject to third party intellectual property rights, including without limitation, patent, copyright or trademark rights (such a third party may or may not be a member of the EnOcean Alliance.)

The EnOcean Alliance is not responsible and shall not be held responsible in any manner for identifying or failing to identify any or all such third party intellectual property rights. This document and the information contained herein are provided on an “as is” basis and the EnOcean Alliance disclaims all warranties express or implied, including but not limited to

- (1) any warranty that the use of the information herein will not infringe any rights of third parties (including any intellectual property rights, patent, copyright or trademark rights, or
- (2) any implied warranties of merchantability, fitness for a particular purpose, title or non-infringement.

In no event will the EnOcean Alliance be liable for any loss of profits, loss of business, loss of use of data, interruption of business, or for any other direct, indirect, special or exemplary, incidental, punitive or consequential damages of any kind, in contract or in tort, in connection with this document or the information contained herein, even if advised of the possibility of such loss or damage. All Company, brand and product names may be trademarks that are the sole property of their respective owners.

The above notice and this paragraph must be included on all copies of this document that are made.

The EnOcean Alliance “EnOcean Equipment Profiles definitions” are available free of charge to companies, individuals and institutions for all non-commercial purposes (including educational research, technical evaluation and development of non-commercial tools or documentation.)

This specification includes intellectual property („IPR“) of the EnOcean Alliance and joint intellectual properties („joint IPR“) with contributing member companies. No part of this

System Specification



specification may be used in development of a product or service for sale without being a participant or promoter member of the EnOcean Alliance and/or joint owner of the appropriate joint IPR.

These errata may not have been subjected to an Intellectual Property review, and as such, may contain undeclared Necessary Claims.

EnOcean Alliance Inc.
2400 Camino Ramon, Suite 375
San Ramon, CA 94583
USA
Graham Martin
Chairman & CEO EnOcean Alliance

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	0x0A	0x0B	0x0C	0x0D	0x0E
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
Humidity Sensor	X	X	-	-	-	-	-	-	X	X	-	-	-	-	-
Temperature Sensor	X	-	X	X	X	X	-	-	X	-	X	X	X	-	-
Day/Night Sensor	X	X	X	-	-	X	X	X	X	X	-	-	X	X	X
Battery Autonomy	X	X	X	X	-	-	-	X	X	X	X	-	-	-	X

RORG	D2	VLD Telegram
FUNC	04	CO2, Humidity, Temperature, Day/Night and Autonomy
TYPE	1B	Type 0x1B (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)					