System Specification



EnOcean Equipment Profiles

REVISION HISTORY

Ver.	Editor	Change	Date
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System Specification

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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	0x16
CO2 Sensor 0-2000	Χ	Х	X	X	X	X	X	X	-	-	-	-	-	-	-	-
ppm range																
CO2 Sensor 0-5000	-	-	-	-	-	-	-	-	Χ	Χ	X	Χ	X	X	Χ	X
ppm range																
Humidity Sensor	Χ	X	-	-	-	-	-	-	X	X	-	-	-	-	-	-
Temperature Sensor	Χ	-	X	X	Χ	X	-	-	X	-	X	X	X	X	-	-
Day/Night Sensor	Χ	X	X	-	-	X	X	X	X	X	X	-	-	X	Χ	Х
Battery Autonomy	Χ	Χ	X	X	-	-	-	X	Χ	Χ	X	X	-	-	-	X

RORG	D2	VLD Telegram
FUNC	04	CO2, Humidity, Temperature, Day/Night and Autonomy
TYPE	02	Type 0x02 (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		Concentration (linear), 1 LSB = 7.84 ppm Or Concentration (linear), 1 LSB = 19.6 ppm	0255	02000 (or 5000)	ppm
8	8	Humidity	HUM	Rel. Humidity (linear), 1 LSB = 0.5 %	0200	0100	%
16	8	Temperature	TMP	Temperature (linear), 1 LSB = 0.2 °C	0255	0+51	°C
24	1	Day/Night	DN		Enum: 0: Day 1: Night	_	
25	3	Battery autonomy	BA	Battery autonomy	1: 87.5 - 6 2: 75 - 6 3: 62.5 - 4: 50 - 3 5: 37.5 -	87.5 % - 75 % 52.5 % - 50 % 87.5 % - 25 % 12.5 % - 0 %	
28	4	Not Used (= 0)					

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