EnOcean Equipment Profiles

REVISION HISTORY

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

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D2-02: Sensors for Temperature, Illumination, Occupancy And Smoke

This EEP family shall be used for bidirectional sensors that measure temperature, illumination, and detect room occupancy and smoke presence.

The EEP may be used in conjunction with the Smart Acknowledge protocol.

For teach-in and teach-out the "Universal Uni- and Bidirectional Teach-In Procedure for EEP based Communication" shall be used. Alternatively the Smart Acknowledge Teach-In Procedure is used for those sensors supporting Smart Acknowledge.

Supported function	Type 0x00	Type 0x01	Type 0x02
Temperature Sensor	X	X	X
Illumination Sensor	X	X	-
Occupancy Detector	X	-	-
Smoke Detector	X	X	X

RORG	D2	VLD Telegram
FUNC	02	Sensors for Temperature, Illumination, Occupancy And Smoke
TYPE	01	Type 0x01 (description: see table)

Submitter: MSR-Office

CMD 0x1 - Sensor Measurement

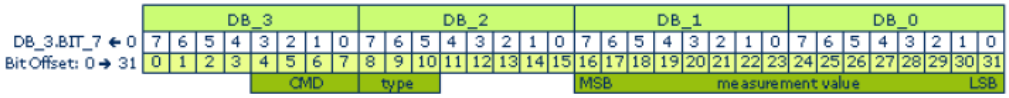
This message is sent by a sensor if one of the following events occurs:

- Measurement results trigger an automated transmission (see Actuator Set Measurement message)

- Message Actuator Measurement Query has been received

Response Timing: None

Command ID 01 (CMD)



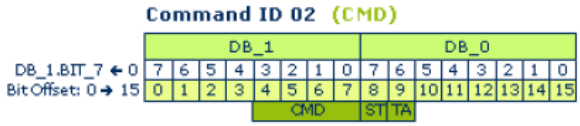
Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	4	Not Used (= 0)					
4	4	Command ID	CMD	command identifier	Enum: 0x01: ID 01		
8	3	Measurement type	type		Enum: 0x00: Temperature (0...65535: -40 to +120°C) 0x01: Illumination (0...65535: 0 to 2047lx) 0x02: Occupancy (0: not detected; 1: detected) 0x03: Smoke The following content applies for the value in DB_0 and DB_1: 0x00 - No smoke detected 0x01 - Smoke detected via ionization chamber 0x02 - Smoke detected via optical chamber 0x03 - Smoke detected via both chambers		
11	5	Not Used (= 0)					
16	16	Measurement value (2 bytes)	MV	DB_0 = LSB / DB_1 = MSB	0...65535	...	N/A

CMD 0x2 - Sensor Test/Trigger

This message is sent to a sensor. It causes the sensor to enter self-test mode or trigger an alarm (if supported).

Response Timing: None

Command ID 02 (CMD)

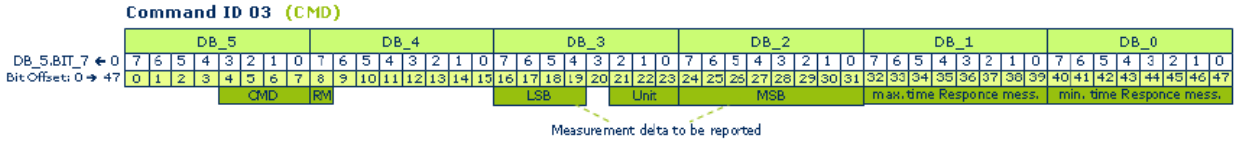


Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	4	Not Used (= 0)					
4	4	Command ID	CMD	Command identifier	Enum: 0x02: ID 02		
8	1	Self-test	ST		Enum: 0b0: Self-test mode 0b1: Normal operation		
9	1	Trigger alarm	TA		Enum: 0b0: Trigger alarm 0b1: Normal operation		
10	6	Not Used (= 0)					

CMD 0x3 - Actuator Set Measurement

This message is sent to a sensor. It configures the measurement behaviour of the sensor.

Response Timing: None



Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	4	Not Used (= 0)					
4	4	Command ID	CMD	Command identifier	Enum: 0x03: ID 03		
8	1	Report measurement	RM		Enum: 0b0: Report measurement: query only 0b1: Report measurement: query / auto reporting		
9	7	Not Used (= 0)					
16	4	Measurement delta to be reported (LSB)	MD_LSB		0...4095	0...4095	N/A
20	1	Not Used (= 0)					
21	3	Unit	UN		Enum: 0x00: Temperature (°C) 0x01: Illumination (lx) 0x02...0x07: Not used		
24	8	Measurement delta to be reported (MSB)	MD_MSB		0...4095	0...4095	N/A
32	8	Maximum time between two subsequent Actuator	MAT	Measurement Response messages [10s]	0...255	10...2550	s
40	8	Minimum time between two subsequent Actuator	MIT	Measurement Response messages [s]	0...255	0...255	s

CMD 0x4 - Sensor Measurement Query

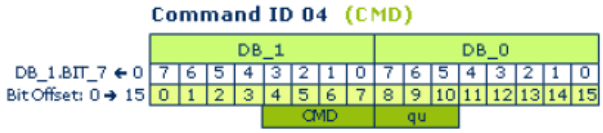
This message is sent to a sensor. The sensor replies with an Sensor Measurement message.

Response Timing:
A Sensor Measurement message shall be received within a maximum of 300ms from the time of transmission of this message.
In case no such response is received within this time frame the action shall be treated as completed without result.

CMD 0x4 - Sensor Measurement Query

This message is sent to a sensor. The sensor replies with an Sensor Measurement message.

Response Timing:
A Sensor Measurement message shall be received within a maximum of 300ms from the time of transmission of this message.
In case no such response is received within this time frame the action shall be treated as completed without result.



Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	4	Not Used (= 0)					
4	4	Command ID	CMD	Command identifier	Enum: 0x04: ID 04		
8	3	Query	qu		Enum: 0x0: Query temperature 0x1: Query illumination 0x2: Query occupancy 0x3: Query smoke 0x4...0x7: Not used		
11	5	Not Used (= 0)					