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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D2-34: Heating Actuator

Submitter: AWAG Elektrotechnik AG

Description
The profile is used to monitor and control a simple heating actuator. The actuator compares the current room temperature with a target temperature (set point) and accordingly switches on and off the heating.

The set point is either taken from a room operating panel (see A5-10-xx profiles) or can be configured by a radio command. A specific set point can be set as well as a relative shift to the panel value. The override can be temporary or permanent.

Data exchange

1. Status update on heartbeat or opmode change:
Direction: unidirectional
Addressing: broadcast
Communication trigger: heartbeat or operation mode change
Communication interval: heartbeat configurable: off / 30 sec / 3 min
Trigger event: opmode change or heartbeat
Tx delay: n/a
Rx timeout: n/a

2. Status response and set point response are replies to the corresponding requests. A request for all channels results in a separate reply for each channel:
Direction: bidirectional
Addressing: unicast (ADT)
Communication trigger: request
Communication interval: n/a
Trigger event: n/a
Tx delay: 500 ms
Rx timeout: 500 ms

3. Set point configuration is a unconfirmed request (per channel). Success can be determined by a set point query:
Direction: unidirectional
Addressing: unicast (ADT)
Communication trigger: request
Communication interval: n/a
Trigger event: n/a
Tx delay: n/a
Rx timeout: n/a

Teach-in
Teach-in method: Universal teach-in (UTE)

Security
Encryption supported: no
Security level format: -

VLD Family Table:
Each TYPE has to support every command / parameter that is marked in its column!

Supported command	Type 00	Type 01	Type 02
No. of output channels	1	2	8
Status broadcast	X	X	X
Query/Reply status	X	X	X
Configure set point	X	X	X
Query/Reply set point	X	X	X

Supported parameter	Type 00	Type 01	Type 02
Current room temperature	X	X	X
Currently active set point	X	X	X
Panel set point	X	X	X
Operation mode	X	X	X
Set point configuration	X	X	X
Set point override value	X	X	X
Set point shift value	X	X	X
Set point override duration	X	X	X

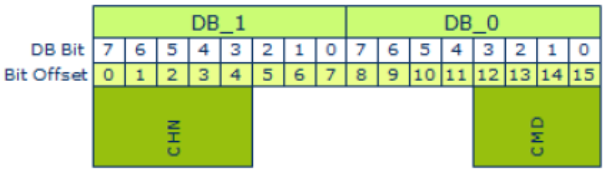
The list of parameters could be structured following the features that always include a certain group of parameters.

Appendix:
Depending on the value of CFG, the set point is evaluated differently:
0: Current set point = room panel value
... SHF, OVR and DUR are ignored
1: Current set point = OVR
... SHF is ignored, fallback to room panel value after DUR
2: Current set point = room panel value + SHF
... OVR is ignored, fallback to room panel value after DUR
3: Current set point = room panel value - SHF
... OVR is ignored, fallback to room panel value after DUR

RORG	D2	VLD Telegram
FUNC	34	Heating Actuator
TYPE	00	1 Output Channel

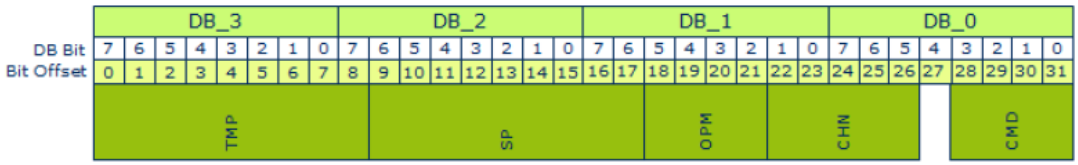
Submitter: AWAG Elektrotechnik AG

CMD 0x3 – Actuator Status Query



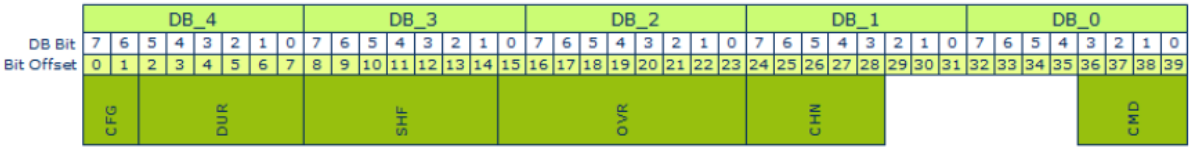
Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	5	Channel	CHN	Channel address	Enum: 0x00...0x1D: 1...30 CHN 0x1E: All channels supported by the device 0x1F: Not used		
5	7	Not Used (= 0)					
12	4	Command ID	CMD	Command identifier	Enum: 3: Status query command		

CMD 0x4 – Actuator Status Response



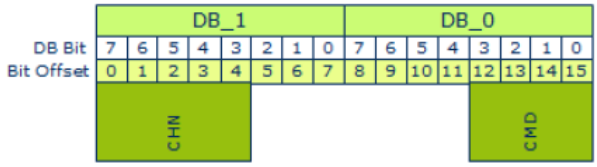
Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	9	Temperature	TMP	Current room temperature	Enum: 0...400: 0...+40 °C 0x1FF: Unknown		
9	9	Set point	SP	Currently active set point	0...400	0...+40	°C
18	4	Operation Mode	OPM	Current mode valid for the channel	Enum: 0x0: Off (deactivated) 0x1: Temperature unknown 0x2: No heating required 0x3: Heating required 0x4...0xF: Not used		
22	5	Channel	CHN	Channel address	Enum: 0x00...0x1D: 1...30 CHN 0x1E: All channels supported by the device 0x1F: Not used		
27	1	Not Used (= 0)					
28	4	Command ID	CMD	Command identifier	Enum: 4: Status response command		

CMD 0x5 – Actuator Set Point Configuration



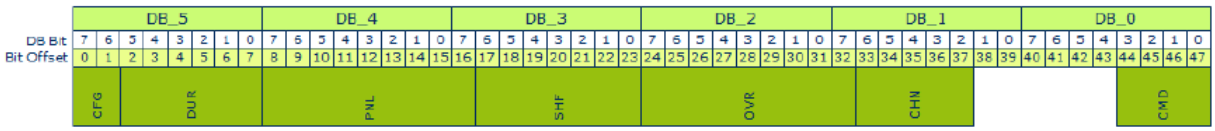
Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	2	Configuration	CFG	How set point is evaluated (see appendix)	Enum: 0: Room panel value 1: Override with OVR 2: Add SHF to panel value 3: Subtract SHF from panel value		
2	6	Duration	DUR	Duration of the override until fallback to room panel value	Enum: 0: Endless 1...63: 1...63 h		
8	7	Set point	SHF	Set point shift value	0...100	0...10	K
15	9	Set point	OVR	Set point override value	0...400	0...+40	°C
24	5	Channel	CHN	Channel address	Enum: 0x00...0x1D: 1...30 CHN 0x1E: All channels supported by the device 0x1F: Not used		
29	7	Not Used (= 0)					
36	4	Command ID	CMD	Command identifier	Enum: 5: Set point configuration command		

CMD 0x6 – Actuator Set Point Query



Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	5	Channel	CHN	Channel address	Enum: 0x00...0x1D: 1...30 CHN 0x1E: All channels supported by the device 0x1F: Not used		
5	7	Not Used (= 0)					
12	4	Command ID	CMD	Command identifier	Enum: 6: Set point query command		

CMD 0x7 – Actuator Set Point Response



Offset	Size	Data	ShortCut	Description	Valid Range	Scale	Unit
0	2	Configuration	CFG	How set point is evaluated (see appendix)	Enum: 0: Room panel value 1: Override with OVR 2: Add SHF to panel value 3: Subtract SHF from panel value		
2	6	Duration	DUR	Remaining override time until fallback to room panel value	Enum: 0: Expired (CFG = 0) 1...63: h 1...63		
8	9	Set point	PNL	Set point provided by room panel	0...400	0...+40	°C
17	7	Set point	SHF	Set point shift value	0...100	0...10	K
24	9	Set point	OVR	Set point override value	0...400	0...+40	°C
33	5	Channel	CHN	Channel address	Enum: 0x00...0x1D: 1...30 CHN 0x1E: All channels supported by the device 0x1F: Not used		
38	6	Not Used (= 0)					
44	4	Command ID	CMD	Command identifier	Enum: 7: Set point response command		