

EnOcean Equipment Profiles

EnOcean Equipment Profiles (EEP) V2.0

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EnOcean Equipment Profiles

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1 INTRODUCTION

This document defines the communication of EnOcean enabled devices with respect to their application layer. It does neither describe the EnOcean Air Interface (Physical and Data Link Layer) nor does it reflect details about Repeating and Routing (Transport Layer) or Encapsulation and Encryption (Presentation Layer).

When reading this document it is essential to understand that defining communication on the application layer needs to be guided by the basic framework of the EnOcean short range wireless technology:

- self powered EnOcean devices use energy harvesting mechanisms, thus energy is always a resource that requires extraordinary design attention
- energy efficiency during radio reception and transmission is of key importance
- transmission duration directly affects communication robustness
- data processing capabilities of the Dolphin ASIC are closely linked with the user application and energy budget of an individual EnOcean enabled product

All interoperable EnOcean enabled devices need to be declared compliant to one or more of the EnOcean Equipment Profiles described in this document. Such declaration needs to be done by the vendor prior to market introduction and in line with the Certification Specification of the EnOcean Alliance.

The EnOcean Equipment Profile (EEP) is a unique identifier that describes the functionality of an EnOcean device irrespective of its vendor.

The EEP is defined as following:

ORG – FUNC – TYPE	Ranges:	ORG	0x00 ... 0xFF
		FUNC	0x00 ... 0x3F
		TYPE	0x00 ... 0x7F

Where the ORG field identifies the EnOcean Messages the communication of an EnOcean device is based on and FUNC (was "Profile" in the EnOcean GmbH Specification) and TYPE (was "Type" in the EnOcean GmbH Specification) gives further specification of the EnOcean device functionality.

ORG values currently defined:

ORG VALUE	Message
0x05	RPS
0x06	1BS
0x07	4BS

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2 ORG = 0x05 RPS TELEGRAM

2.1 Data Payload Definition of API:

DATA BYTE	DATA CONTENT
ORG	0x05
DB_3	Data byte 3
DB_2	Data Byte 2
DB_1	Data byte 1
DB_0	Data byte 0
ID_3	Byte 3 of transmitter ID
ID_2	Byte 2 of transmitter ID
ID_1	Byte 1 of transmitter ID
ID_0	Byte 0 of transmitter ID
STATUS	Status information

2.2 EEP Definition

STATUS FIELD

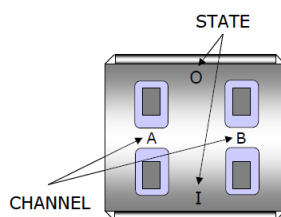
7		0	
Reserved	T21	NU	RP_COUNTER
Reserved	(2 bit)	(1 bit)	(4 bit)
T21	(1 bit)	NU	(1 bit)
RP_COUNTER	(4 bit)	For future use, default value 0	
		T21=0 → telegram of type 1	
		T21=1 → telegram of type 2	
		NU=1 → N-message, NU=0 → U-message.	
		Repeater count	

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FUNC = 02 Rocker Switch, 2 Rocker

For clarification reasons the following picture shows a PTM200 transmitter module from EnOcean GmbH which transmits RPS telegrams and is one possibility to be used in applications that require an EEP 05-02-xx.

Please note that PTM200 does not support transmission of teach-in telegrams. To teach-in a PTM200 to a controller or actuator using a specific EEP the Remote Learn function from the EnOcean Remote Management feature set may be used.



The button naming used below is referring to CHANNEL and STATE of the PTM200. Thus "Button AI" means STATE „I" on CHANNEL „A".

There are two different message types, the N-message and the U-message, which need to be identified from the Status Field of an EnOcean RPS telegram. For that reason not only the data bytes are given for each EEP but the TS and NU bits of the Status Field are listed as well.

TYPE = 01 **Light and Blind Control – Application Style 1**

EEP: 05-02-01

IMPORTANT NOTE:

This EEP definition is based on the assumption that a RPS switch module (e.g. PTM200) is installed in a 0-STATE up position!

Application Style 1 is widely used in EU but may be found in other markets as well.

N-MESSAGE STATUS FIELD

T21 = 1
NU = 1

DATA BYTES

DB_3.BIT_7...5:	Rocker 1 st Action	0b000	Button AI:	"Switch light on" or "Dim light down" or "Move blind down"
		0b001	Button A0:	"Switch light off" or "Dim light up" or "Move blind up"
		0b010	Button BI:	"Switch light on" or "Dim light down" or "Move blind down"

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		0b011	Button B0:	"Switch light off" or "Dim light up" or "Move blind up"
DB_3.BIT_4:	Energy Bow	0b0	released	
		0b1	pressed	
DB_3.BIT_3...1:	Rocker 2 nd Action	0b000	Button AI:	see AI above
		0b001	Button A0:	see A0 above
		0b010	Button BI:	see BI above
		0b011	Button B0:	see B0 above
DB_3.BIT_0:	2 nd Action	0b0	no 2 nd action	
		0b1	2 nd action valid	
DB_2:	not used	0h00		
DB_1:	not used	0h00		
DB_0:	not used	0h00		

U-MESSAGE STATUS FIELD

T21 = 1
NU = 0

DATA BYTES

DB_3.BIT_7...5:	Number of buttons pressed simultaneously	0b000	no button
		0b011	3 or 4 buttons
		other bit combinations are not valid	
DB_3.BIT_4:	Energy Bow	0b0	released
		0b1	pressed
DB_3.BIT_3...0:	not used	0h0	
DB_2:	not used	0h00	
DB_1:	not used	0h00	
DB_0:	not used	0h00	

TYPE = 02

EEP: 05-02-02

Light and Blind Control – Application Style 2

IMPORTANT NOTE:

This EEP definition is based on the assumption that a RPS switch module (e.g. PTM200) is installed in an I-STATE up position!

Application Style 2 is typically used in US and CAN but may be found in other markets as well.

N-MESSAGE STATUS FIELD

T21 = 1
NU = 1

DATA BYTES

DB_3.BIT_7...5:	Rocker 1 st Action	0b000	Button AI:	"Switch light on" or
-----------------	-------------------------------	-------	------------	----------------------

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				“Dim light up” or “Move blind up”
		0b001	Button A0:	“Switch light off” or “Dim light down” or “Move blind down”
		0b010	Button BI:	“Switch light on” or “Dim light up” or “Move blind up”
		0b011	Button B0:	“Switch light off” or “Dim light down” or “Move blind down”
DB_3.BIT_4:	Energy Bow	0b0	released	
		0b1	pressed	
DB_3.BIT_3...1:	Rocker 2 nd Action	0b000	Button AI:	see AI above
		0b001	Button A0:	see A0 above
		0b010	Button BI:	see BI above
		0b011	Button B0:	see B0 above
DB_3.BIT_0:	2 nd Action	0b0	no 2 nd action	
		0b1	2 nd action valid	
DB_2:	not used	0h00		
DB_1:	not used	0h00		
DB_0:	not used	0h00		

U-MESSAGE STATUS FIELD

$T21 = 1$

$NU = 0$

DATA BYTES

DB_3.BIT_7...5:	Number of buttons pressed simultaneously	0b000	no button
		0b011	3 or 4 buttons
		other bit combinations are not valid	
DB_3.BIT_4:	Energy Bow	0b0	released
		0b1	pressed
DB_3.BIT_3...0:	not used	0h0	
DB_2:	not used	0h00	
DB_1:	not used	0h00	
DB_0:	not used	0h00	

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FUNC = 03 Rocker Switch, 4 Rocker

TYPE = 01

EEP: 05-03-01

Light and Blind Control – Application Style 1

A This EEP definition is based on the assumption that a RPS switch module is installed in a 0-STATE up position!

Application Style 1 is widely used in EU but may be found in other markets as well.

N-MESSAGE STATUS FIELD

T21 = 0

NU = 1

DATA BYTES

DB_3.BIT_7...5:	Rocker 1 st Action	0b000	Button AI:	"Switch light on" or "Dim light down" or "Move blind down"
		0b001	Button A0:	"Switch light off" or "Dim light up" or "Move blind up"
		0b010	Button BI:	"Switch light on" or "Dim light down" or "Move blind down"
		0b011	Button B0:	"Switch light off" or "Dim light up" or "Move blind up"
		0b100	Button CI:	"Switch light on" or "Dim light down" or "Move blind down"
		0b101	Button C0:	"Switch light off" or "Dim light up" or "Move blind up"
		0b110	Button DI:	"Switch light on" or "Dim light down" or "Move blind down"
		0b111	Button D0:	"Switch light off" or "Dim light up" or "Move blind up"
DB_3.BIT_4:	Energy Bow	0b0	released	
		0b1	pressed	
DB_3.BIT_3...1:	Rocker 2 nd Action	0b000	Button AI:	see AI above
		0b001	Button A0:	see AO above
		0b010	Button BI:	see BI above
		0b011	Button B0:	see B0 above
		0b100	Button CI:	see CI above
		0b101	Button C0:	see C0 above

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		0b110	Button DI:	see DI above
		0b111	Button D0:	see D0 above
DB_3.BIT_0:	2 nd Action	0b0	no 2 nd action	
		0b1	2 nd action valid	
DB_2:	not used	0h00		
DB_1:	not used	0h00		
DB_0:	not used	0h00		

U-MESSAGE STATUS FIELD

T21 = 0

NU = 0

DATA BYTES

DB_3.BIT_7...5:	Number of buttons pressed simultaneously	0b000	no button
		0b001	2 buttons
		0b010	3 buttons
		...	
		0b111	8 buttons
DB_3.BIT_4:	Energy Bow	0b0	released
		0b1	pressed
DB_3.BIT_3...0:	not used	0h0	
DB_2:	not used	0h00	
DB_1:	not used	0h00	
DB_0:	not used	0h00	

EnOcean Equipment Profiles

TYPE = 02

EEP: 05-03-02

Light and Blind Control – Application Style 2

A This EEP definition is based on the assumption that a RPS switch module is installed in a I-STATE up position!

Application Style 2 is typically used in US and CAN but may be found in other markets as well.

N-MESSAGE STATUS FIELD

T21 = 0

NU = 1

DATA BYTES

DB_3.BIT_7...5:	Rocker 1 st Action	0b000	Button AI:	"Switch light on" or "Dim light up" or "Move blind up"
		0b001	Button A0:	"Switch light off" or "Dim light down" or "Move blind down"
		0b010	Button BI:	"Switch light on" or "Dim light up" or "Move blind up"
		0b011	Button B0:	"Switch light off" or "Dim light down" or "Move blind down"
		0b100	Button CI:	"Switch light on" or "Dim light up" or "Move blind up"
		0b101	Button C0:	"Switch light off" or "Dim light down" or "Move blind down"
		0b110	Button DI:	"Switch light on" or "Dim light up" or "Move blind up"
		0b111	Button D0:	"Switch light off" or "Dim light down" or "Move blind down"
DB_3.BIT_4:	Energy Bow	0b0	released	
		0b1	pressed	
DB_3.BIT_3...1:	Rocker 2 nd Action	0b000	Button AI:	see AI above
		0b001	Button A0:	see AO above
		0b010	Button BI:	see BI above
		0b011	Button B0:	see B0 above
		0b100	Button CI:	see CI above
		0b101	Button C0:	see C0 above
		0b110	Button DI:	see DI above
		0b111	Button D0:	see D0 above
DB_3.BIT_0:	2 nd Action	0b0	no 2 nd action	

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DB_2:	not used	0b1	2 nd action valid
DB_1:	not used	0h00	
DB_0:	not used	0h00	

U-MESSAGE STATUS FIELD

T21 = 0

NU = 0

DATA BYTES

DB_3.BIT_7...5:	Number of buttons pressed simultaneously	0b000	no button
		0b001	2 buttons
		0b010	3 buttons
		...	
		0b111	8 buttons
DB_3.BIT_4:	Energy Bow	0b0	released
		0b1	pressed
DB_3.BIT_3...0:	not used	0h0	
DB_2:	not used	0h00	
DB_1:	not used	0h00	
DB_0:	not used	0h00	

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FUNC = 04 Position Switch, Home and Office Application

TYPE = 01

EEP: 05-04-01

Key Card Activated Switch

Insertion of Key Card generates an N-Message, take-out a U-Message:

N-MESSAGE STATUS FIELD

T21 = 1

NU = 1

DATA BYTES

DB_3:	Key Card	0h70	inserted
DB_2:	not used	0h00	
DB_1:	not used	0h00	
DB_0:	not used	0h00	

U-MESSAGE STATUS FIELD

T21 = 1

NU = 0

DATA BYTES

DB_3:	Key Card	0h00	taken out
DB_2:	not used	0h00	
DB_1:	not used	0h00	
DB_0:	not used	0h00	

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FUNC = 05
TBD

Position Switch, Industrial Application

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FUNC = 10 Mechanical Handle

TYPE = 00 – Window Handle

EEP: 05-10-00



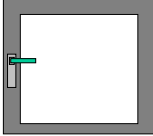
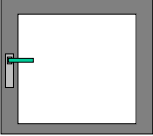




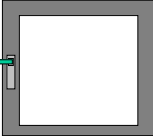





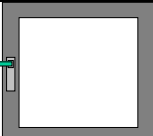
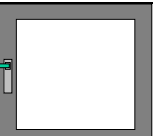

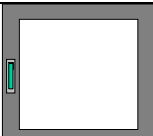
STATUS FIELD

T21 = 1 (telegram of type 2):

NU = 0 (U-message from a PTM switch module):

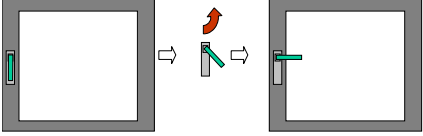
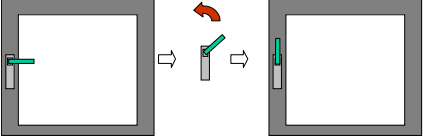
DATA BYTES

DB_2..0 always = 0

	⇒		⇒		DB_3 = 0b11X0XXXX
	⇒		⇒		DB_3 = 0b1111XXXX
	⇒		⇒		DB_3 = 0b11X0XXXX
	⇒		⇒		DB_3 = 0b1101XXXX
	⇒		⇒		DB_3 = 0b11X0XXXX
	⇒		⇒		DB_3 = 0b1111XXXX

IMPORTANT NOTE:
The bits marked with 'X' in DB_3 should not be checked. These bits can be '1' or '0' and should not be assumed to be a defined value, because both of them are allowed and not predictable!

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	<p>DB_3 = 0b11X0XXXX</p>
	<p>DB_3 = 0b1101XXXX</p>

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3 **ORG = 0x06 1BS TELEGRAM**

3.1 **Data Payload Definition of API:**

DATA BYTE	DATA CONTENT
ORG	0x06
DB_3	Data byte 3
DB_2	Data Byte 2
DB_1	Data byte 1
DB_0	Data byte 0
ID_3	Byte 3 of transmitter ID
ID_2	Byte 2 of transmitter ID
ID_1	Byte 1 of transmitter ID
ID_0	Byte 0 of transmitter ID
STATUS	Status information

3.2 **EEP Definition**

STATUS FIELD

7		0
Reserved	RP_COUNTER	

Reserved (4 bit) for future use, default value 0
 RP_COUNTER (4 bit) Repeater count

FUNC = 00 Contacts & Switches

DATA BYTES

TYPE = 01 – Single Input Contact

EEP: 06-00-01

DB_2..0 always = 0
 DB_3.BIT_0 0 contact open
 1 contact closed
 DB_3.BIT_3 0 LRN Button pressed
 1 LRN Button not pressed

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4 ORG = 0x07 4BS TELEGRAM

4.1 Introduction

In order to allow communication between sensors and actuators from different manufacturers a standard teach-in procedure is required.

A receiver needs to know from which type of transmitter a message is coming. To keep the radio telegram as short as possible the transmitter will inform the receiver during the teach-in procedure about its characteristics.

Each transmitter which communicates based on the EnOcean „4BS“ telegram will transmit a special telegram containing „profile“, „device type“ and „manufacturer ID“ during the teach-in procedure. A special bit is set to distinguish it from normal telegrams. There are 6 bit for device „profiles“, 7 bit for device „types“ and 11 bit for the „manufacturer ID“.

4.2 Teach-In Telegram

The teach-in telegram has the same structure as a normal 4BS telegram:

DB_3						DB_2						DB_1						DB_0							
7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0		
FUNC						TYPE						Manufacturer ID						LRN	0	0	0	LRN	d	d	d
																		Typ							

The LRN bit (DB_0.Bit_3) must be set "0" to signalize a teach-in telegram.

The LRN Type bit (DB_0.BIT_7) signalizes whether the teach-in telegram contains information on Profile, Type and Manufacturer ID (LRN Type = "1") or if regular data is sent (LRN Type = "0").

Remark:

Under no circumstances applications using an EEP with ORG = 0x07 may use DB_0.Bit_3 for communication purposes other than indicating a teach-in procedure. Not sticking with this regulation may cause severe problems in live EnOcean networks!

4.3 Data Payload Definition of API:

DATA BYTE	DATA CONTENT
ORG	0x07
DB_3	Data byte 3
DB_2	Data Byte 2
DB_1	Data byte 1
DB_0	Data byte 0
ID_3	Byte 3 of transmitter ID
ID_2	Byte 2 of transmitter ID

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ID_1	Byte 1 of transmitter ID
ID_0	Byte 0 of transmitter ID
STATUS	Status information

4.4 EEP Definition

STATUS FIELD

7	0
Reserved	RP_COUNTER

Reserved (4 bit) for future use, default value 0
 RP_COUNTER (4 bit) Repeater count

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FUNC = 02 Temperature Sensor

DATA BYTES

TYPE = 01

EEP: 07-02-01

Range -40°C to 0°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	-40...0°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram	
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 02

EEP: 07-02-02

Range -30°C to +10°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	-30...10°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram	
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 03

EEP: 07-02-03

Range -20°C to +20°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	-20...20°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		

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DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 04

EEP: 07-02-04

Range -10°C to +30°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		-10...30°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 05

EEP: 07-02-05

Range 0°C to +40°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		0...40°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 06

EEP: 07-02-06

Range +10°C to +50°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		10...50°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		

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DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 07

EEP: 07-02-07

Range +20°C to +60°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	20...60°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 08

EEP: 07-02-08

Range +30°C to +70°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperatur	30...70°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 09

EEP: 07-02-09

Range +40°C to +80°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	40...80°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		

EnOcean Equipment Profiles

DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 0A

EEP: 07-02-0A

Range +50°C to +90°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	50...90°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 0B

EEP: 07-02-0B

Range +60°C to +100°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	60...100°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 10

EEP: 07-02-10

Range -60°C to +20°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	-60...20°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		

EnOcean Equipment Profiles

DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 11

EEP: 07-02-11

Range -50°C to +30°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		-50...30°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 12

EEP: 07-02-12

Range -40°C to +40°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		-40...40°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 13

EEP: 07-02-13

Range -30°C to +50°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		-30...50°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		

EnOcean Equipment Profiles

DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 14

EEP: 07-02-14

Range -20°C to +60°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		-20...60°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 15

EEP: 07-02-15

Range -10°C to +70°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		-10...70°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 16

EEP: 07-02-16

Range 0°C to +80°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature		0...80°C, linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		

EnOcean Equipment Profiles

DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 17

EEP: 07-02-17

Range +10°C to +90°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	10...90°C,	linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 18

EEP: 07-02-18

Range +20°C to +100°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	20...100°C,	linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 19

EEP: 07-02-19

Range +30°C to +110°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	30...110°C,	linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		

EnOcean Equipment Profiles

DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 1A

EEP: 07-02-1A

Range +40°C to +120°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	40...120°C,	linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

TYPE = 1B

EEP: 07-02-1B

Range +50°C to +130°C

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	50...130°C,	linear n=255...0
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

EnOcean Equipment Profiles

FUNC = 04 Temperature & Humidity Sensor

DATA BYTES

TYPE = 01

EEP: 07-04-01

Range 0°C to +40°C and 0% to 100%

DB_3	not used		
DB_2:	Rel. Humidity	0...100%, linear n=0...250	
DB_1:	Temperature	0...40°C, linear n=0...250	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram	
DB_0.BIT_2:	not used		
DB_0.BIT_1:	T-Sensor	0b0 Temperature sensor not available 0b1 Temperature sensor available	
DB_0.BIT_0:	not used		

EnOcean Equipment Profiles

FUNC = 05 Pressure Sensor
TBD

EnOcean Equipment Profiles

FUNC = 06 Light Sensor

DATA BYTES

TYPE = 01

EEP: 07-06-01

Range 300lx to 60.000lx

DB_3:	Supply voltage	0...5.1V, linear n=0...255
DB_2:	Illumination	300...30.000 lx, linear n=0...255
DB_1:	Illumination	600...60.000 lx, linear n=0...255
DB_0.BIT_7:	not used	
DB_0.BIT_6:	not used	
DB_0.BIT_5:	not used	
DB_0.BIT_4:	not used	
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram
DB_0.BIT_2:	not used	
DB_0.BIT_1:	not used	
DB_0.BIT_0:	Range select	0b0 Range acc. to DB_1 0b1 Range acc. to DB_2

TYPE = 02

EEP: 07-06-02

Range 0lx to 1.024lx

DB_3:	Supply voltage	0...5.1V, linear n=0...255
DB_2:	Illumination	0...510 lx, linear n=0...255
DB_1:	Illumination	0...1.024 lx, linear n=0...255
DB_0.BIT_7:	not used	
DB_0.BIT_6:	not used	
DB_0.BIT_5:	not used	
DB_0.BIT_4:	not used	
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram
DB_0.BIT_2:	not used	
DB_0.BIT_1:	not used	
DB_0.BIT_0:	Range select	0b0 Range acc. to DB_1 0b1 Range acc. to DB_2

EnOcean Equipment Profiles

FUNC = 07 Occupancy Sensor

DATA BYTES

TYPE = 01

EEP: 07-07-01

Occupancy

DB_3	not used		
DB_2	not used		
DB_1:	PIR Status	0...127	PIR off
		127...255	PIR on
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	not used		

Remark:

The transmission of "PIR off" telegrams is optional.

EnOcean Equipment Profiles

FUNC = 08 Light, Temperature & Occupancy Sensor

DATA BYTES

TYPE = 01

EEP: 07-08-01

Range 0lx to 510lx, 0°C to +51°C and Occupancy

DB_3	Supply voltage	0...5.1V, linear n=0...255
DB_2:	Illumination	0...510lx, linear n=0...255
DB_1:	Temperature	0...51°C, linear n=0...255
DB_0.BIT_7:	not used	
DB_0.BIT_6:	not used	
DB_0.BIT_5:	not used	
DB_0.BIT_4:	not used	
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram
DB_0.BIT_2:	not used	
DB_0.BIT_1:	PIR Status	0b0 PIR on 0b1 PIR off
DB_0.BIT_0:	Occupancy	0b0 Button pressed 0b1 Button released

E.g. for ceiling suspended sensor.

TYPE = 02

EEP: 07-08-02

Range 0lx to 1020lx, 0°C to +51°C and Occupancy

DB_3	Supply voltage	0...5.1V, linear n=0...255
DB_2:	Illumination	0...1020lx, linear n=0...255
DB_1:	Temperature	0...51°C, linear n=0...255
DB_0.BIT_7:	not used	
DB_0.BIT_6:	not used	
DB_0.BIT_5:	not used	
DB_0.BIT_4:	not used	
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram
DB_0.BIT_2:	not used	
DB_0.BIT_1:	PIR Status	0b0 PIR on 0b1 PIR off
DB_0.BIT_0:	Occupancy	0b0 Button pressed 0b1 Button released

E.g. for wall mounted sensor.

TYPE = 03

EEP: 07-08-03

Range 0lx to 1530lx, -30°C to +50°C and Occupancy

DB_3	Supply voltage	0...5.1V, linear n=0...255
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EnOcean Equipment Profiles

DB_2:	Illumination	0...1530lx, linear n=0...255
DB_1:	Temperature	-30...50°C, linear n=0...255
DB_0.BIT_7:	not used	
DB_0.BIT_6:	not used	
DB_0.BIT_5:	not used	
DB_0.BIT_4:	not used	
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram
DB_0.BIT_2:	not used	
DB_0.BIT_1:	PIR Status	0b0 PIR on 0b1 PIR off
DB_0.BIT_0:	Occupancy	0b0 Button pressed 0b1 Button released

E.g. for outdoor sensor.

EnOcean Equipment Profiles

FUNC = 09 Gas Sensor

DATA BYTES

TYPE = 01

EEP: 07-09-01

CO Sensor

DB_3:	Concentration	0...TBD ppm, linear n=0...255
DB_2:	Concentration	0...TBD ppm, linear n=0...255
DB_1:	Temperature	TBD...TBD °C, linear n=0...255
DB_0.BIT_7:	not used	
DB_0.BIT_6:	not used	
DB_0.BIT_5:	not used	
DB_0.BIT_4:	not used	
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram
DB_0.BIT_2:	not used	
DB_0.BIT_1:	T-Sensor	0b0 Temperature Sensor not available 0b1 Temperature Sensor available
DB_0.BIT_0:	not used	

TYPE = 04

EEP: 07-09-04

CO₂ Sensor

TBD

TYPE = 08

EEP: 07-09-08

O₂ Sensor

TBD

TYPE = 0C

EEP: 07-09-0C

Propane Sensor

TBD

EnOcean Equipment Profiles

FUNC = 10 Room Operating Panel

DATA BYTES

TYPE = 01

EEP: 07-10-01

Temperature Sensor; Set Point, Fan Speed and Occupancy Control

DB_3:	Turn-switch for fan speed		
	Stage Auto	210 ... 255	
	Stage 0	190 ... 209	
	Stage 1	165 ... 189	
	Stage 2	145 ... 164	
	Stage 3	0 ... 144	
DB_2:	Set point	Min. - ... Max. +, linear n=0...255	
DB_1:	Temperature	0...40°C, linear n=255...0	
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram	
DB_0.BIT_0:	Occupancy button	0 = Button pressed	

TYPE = 02

EEP: 07-10-02

Temperature Sensor; Set Point, Fan Speed and Day/Night Control

DB_3:	Turn-switch for fan speed		
	Stage Auto	210 ... 255	
	Stage 0	190 ... 209	
	Stage 1	165 ... 189	
	Stage 2	145 ... 164	
	Stage 3	0 ... 144	
DB_2:	Set point	Min. - ... Max. +, linear n=0...255	
DB_1:	Temperature	0...40°C, linear n=255...0	
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram	
DB_0.BIT_0:	Slide switch 0/I or Slide switch Day/Night	0 = Position „I“ 0 = Position „Night“	

EnOcean Equipment Profiles

TYPE = 03

EEP: 07-10-03

Temperature Sensor; Set Point Control

DB_2:	Set point	Min. - ... Max. +, linear n=0...255
DB_1:	Temperature	0...40°C, linear n=255...0
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram

TYPE = 04

EEP: 07-10-04

Temperature Sensor; Set Point and Fan Speed Control

DB_3:	Turn-switch for Fan speed	
	Stage Auto	210 ... 255
	Stage 0	190 ... 209
	Stage 1	165 ... 189
	Stage 2	145 ... 164
	Stage 3	0 ... 144
DB_2:	Set point	Min. - ... Max. +, linear n=0...255
DB_1:	Temperature	0...40°C, linear n=255...0
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram

TYPE = 05

EEP: 07-10-05

Temperature Sensor; Set Point and Occupancy Control

DB_2:	Set point	Min. - ... Max. +, linear n=0...255
DB_1:	Temperature	0...40°C, linear n=255...0
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
DB_0.BIT_0:	Occupancy button	0 = Button pressed

TYPE = 06

EEP: 07-10-06

Temperature Sensor; Set Point and Day/Night Control

DB_2:	Set point	Min. - ... Max. +, linear n=0...255
DB_1:	Temperature	0...40°C, linear n=255...0

EnOcean Equipment Profiles

DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
DB_0.BIT_0:	Slide switch 0/I or Slide switch Day/Night	0 = Position „I“ 0 = Position „Night“

TYPE = 07

EEP: 07-10-07

Temperature Sensor; Fan Speed Control

DB_3:	Turn-switch for Fan speed	
	Stage Auto	210 ... 255
	Stage 0	190 ... 209
	Stage 1	165 ... 189
	Stage 2	145 ... 164
	Stage 3	0 ... 144
DB_1:	Temperature	0...40°C, linear n=255...0
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram

TYPE = 08

EEP: 07-10-08

Temperature Sensor; Fan Speed and Occupancy Control

DB_3:	Turn-switch for Fan speed	
	Stage Auto	210 ... 255
	Stage 0	190 ... 209
	Stage 1	165 ... 189
	Stage 2	145 ... 164
	Stage 3	0 ... 144
DB_1:	Temperature	0...40°C, linear n=255...0
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
DB_0.BIT_0:	Occupancy button	0 = Button pressed

TYPE = 09

EEP: 07-10-09

Temperature Sensor; Fan Speed and Day/Night Control

DB_3:	Turn-switch for Fan speed	
	Stage Auto	210 ... 255
	Stage 0	190 ... 209
	Stage 1	165 ... 189
	Stage 2	145 ... 164
	Stage 3	0 ... 144

EnOcean Equipment Profiles

DB_1:	Temperature	0...40°C, linear n=255...0
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
DB_0.BIT_0:	Slide switch 0/I or Slide switch Day/Night	0 = Position „I“ 0 = Position „Night“

TYPE = 0A

EEP: 07-10-0A

Temperature Sensor, Set Point Adjust and Single Input Contact

DB_3	not used		
DB_2:	Set point	Min. - ... Max. +, linear n=0...255	
DB_1:	Temperature	0...40°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram	
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	Contact State	0b0 closed 0b1 open	

TYPE = 0B

EEP: 07-10-0B

Temperature Sensor and Single Input Contact

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	0...40°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram	
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	Input State	0b0 Contact closed 0b1 Contact open	

EnOcean Equipment Profiles

TYPE = 0C

EEP: 07-10-0C

Temperature Sensor and Occupancy Control

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	0...40°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	Occupancy	0b0	Button pressed
		0b1	Button released

TYPE = 0D

EEP: 07-10-0D

Temperature Sensor and Day/Night Control

DB_3	not used		
DB_2	not used		
DB_1:	Temperature	0...40°C, linear n=255...0	
DB_0.BIT_7:	not used		
DB_0.BIT_6:	not used		
DB_0.BIT_5:	not used		
DB_0.BIT_4:	not used		
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used		
DB_0.BIT_1:	not used		
DB_0.BIT_0:	Slide Switch	0b0	Position "I" or "Night"
		0b1	Position "0" or "Day"

TYPE = 10

EEP: 07-10-10

Temperature and Humidity Sensor; Set Point and Occupancy Control

DB_3:	Set point	Min. - ... Max. +, linear n=0...255
DB_2:	Rel. Humidity	0...100%, linear n=0...250
DB_1:	Temperature	0...40°C, linear n=0...250
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
DB_0.BIT_0:	Occupancy button	0 = Button pressed

EnOcean Equipment Profiles

TYPE = 11

EEP: 07-10-11

Temperature and Humidity Sensor; Set Point and Day/Night Control

DB_3:	Set point	Min. - ... Max. +, linear n=0...255
DB_2:	Rel. Humidity	0...100%, linear n=0...250
DB_1:	Temperature	0...40°C, linear n=0...250
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
DB_0.BIT_0:	Slide switch O/I or Slide switch Day/Night	0 = Position „I“ 0 = Position „Night“

TYPE = 12

EEP: 07-10-12

Temperature and Humidity Sensor; Set Point Control

DB_3:	Set point	Min. - ... Max. +, linear n=0...255
DB_2:	Rel. Humidity	0...100%, linear n=0...250
DB_1:	Temperature	0...40°C, linear n=0...250
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram

TYPE = 13

EEP: 07-10-13

Temperature and Humidity Sensor; Occupancy Control

DB_2:	Rel. Humidity	0...100%, linear n=0...250
DB_1:	Temperature	0...40°C, linear n=0...250
DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
DB_0.BIT_0:	Occupancy button	0 = Button pressed

TYPE = 14

EEP: 07-10-14

Temperature and Humidity Sensor; Day/Night Control

DB_2:	Rel. Humidity	0...100%, linear n=0...250
DB_1:	Temperature	0...40°C, linear n=0...250

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DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
DB_0.BIT_0:	Slide switch 0/I or Slide switch Day/Night	0 = Position „I“ 0 = Position „Night“

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FUNC = 11 Controller Status

DATA BYTES

TYPE = 01 – Lighting Controller

EEP: 07-11-01

DB_3	Illumination	0 ... 510lx, linear n=0...255
DB_2	Illumination Set Point	Min. ... Max., linear n=0...255
DB_1:	Dimming Output Level	Min. ... Max., linear n=0...255
DB_0.BIT_7:	Repeater	0b0 disabled 0b1 enabled
DB_0.BIT_6:	Power Relay Timer	0b0 disabled 0b1 enabled
DB_0.BIT_5:	Daylight Harvesting	0b0 disabled 0b1 enabled
DB_0.BIT_4:	Dimming	0b0 switching load 0b1 dimming load
DB_0.BIT_3:	Learn button	0b0 Teach-in telegram 0b1 Data telegram
DB_0.BIT_2:	Magnet Contact	0b0 open 0b1 closed
DB_0.BIT_1:	Occupancy	0b0 unoccupied 0b1 occupied
DB_0.BIT_0:	Power Relay	0b0 off 0b1 on

EnOcean Equipment Profiles

FUNC = 30 Digital Input

DATA BYTES

TYPE = 01

EEP: 07-30-01

Single Input Contact, Battery Monitor

DB_3:	not used	0h00	
DB_2:	Supply voltage	0...120	Battery LOW
		121...255	Battery OK
DB_1:	Input State	0...195	Contact closed
		196...255	Contact open
DB_0.BIT_7:	not used	0b0	
DB_0.BIT_6:	not used	0b0	
DB_0.BIT_5:	not used	0b0	
DB_0.BIT_4:	not used	0b0	
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used	0b0	
DB_0.BIT_1:	not used	0b0	
DB_0.BIT_0:	not used	0b0	

TYPE = 02

EEP: 07-30-02

Single Input Contact

DB_3:	not used	0h00	
DB_2:	not used	0h00	
DB_1:	not used	0h00	
DB_0.BIT_7:	not used	0b0	
DB_0.BIT_6:	not used	0b0	
DB_0.BIT_5:	not used	0b0	
DB_0.BIT_4:	not used	0b0	
DB_0.BIT_3:	Learn button	0b0	Teach-in telegram
		0b1	Data telegram
DB_0.BIT_2:	not used	0b0	
DB_0.BIT_1:	not used	0b0	
DB_0.BIT_0:	Input State	0b0	Contact closed
		0b1	Contact open

EnOcean Equipment Profiles

FUNC = 38 Central Command

Communication between gateway and actuator uses byte DB_3 to identify commands.
Commands 0h01 to 0h7F shall be common to all types belonging to this profile.
Commands 0h80 to 0hFE can be defined individually for each device type.

Command 0h01: Switching

DB_3:	0h01	
DB_2/DB_1:	Time in $\frac{1}{10}$ seconds.	
	No time specified	0h0000
	Time	0h0001 to 0hFFFF $\frac{1}{10}$ seconds
DB_0.BIT_2:	Lock / Unlock	
	Unlock	0
	Lock	1 (lock for duration time if time >0, unlimited time of no time specified. Locking may be cleared with „unlock“. During lock phase no other commands will be accepted or executed.)
DB_0.BIT_1:	Delay or duration (if Time > 0)	
	Duration	0 (Execute switching command immediately and switch back after duration)
	Delay	1 (Execute switching command after delay)
DB_0.BIT_0:	Switching command	
	OFF	0
	ON	1

Command 0h02: Dimming

DB_3:	0h02	
DB_2:	Dimming value (absolute [0...255] or relative [0...100])	
DB_1:	Ramping time in seconds	
	No ramping	0h00
	Seconds to 100%	0h01 to 0hFF seconds
DB_0.BIT_2:	Dimming Range	
	Absolute value	0
	Relative value	1
DB_0.BIT_1:	Store final value	
	NO	0
	YES	1
DB_0.BIT_0:	Switching command	
	OFF	0
	ON	1

TYPE = 08 – PHC Gateway

EEP: 07-38-08

Commands 0x80 to 0xFE are not used.

EnOcean Equipment Profiles

FUNC = 3F Universal

This profile is intended for manufacturer specific applications. Every manufacturer may independently define the types within this profile.

TYPE = 7F – Universal

EEP: 07-3F-7F

DB_0.BIT_3:	Learn button	0 = Teach-in telegram 1 = Data telegram
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EnOcean Equipment Profiles

5 Manufacturer ID

5.1 Manufacturer ID Guidelines

Upon request, alliance members with membership level promoter or participant will be assigned a unique Manufacturer ID by the EnOcean Alliance. Once assigned, usage of this unique Manufacturer ID is mandatory.

For those not holding a unique Manufacturer ID usage of the Multi User Manufacturer ID is mandatory.

Termination of the EnOcean Alliance membership at the membership levels stated above shall also terminate the right of programming an assigned unique Manufacturer ID into devices manufactured after the termination date. However, the unique Manufacturer ID will remain listed in this specification and it will not be assigned to any other alliance member within a time frame of at least 10 years after termination.

The Manufacturer ID applicable to an EnOcean device shall be programmed into any new unit sold to the market after December 2009.

All information and processes required for programming a Manufacturer ID into EnOcean enabled radio modules or chip sets are under the responsibility of the respective Suppliers. Such details are out of scope of the EnOcean Alliance.

5.2 Manufacturer ID Definition

Manufacturer ID range:	0h000 ... 0h7FF (11bit)
Peha	0h001
Thermokon	0h002
Servodan	0h003
EchoFlex Solutions	0h004
Omnio AG	0h005
Hardmeier electronics	0h006
Regulvar Inc.	0h007
Ad Hoc Electronics	0h008
Distech Controls	0h009
Kieback&Peter	0h00A
EnOcean	0h00B
PROBARE	0h00C
Multi user Manufacturer ID	0h7FF

EnOcean Equipment Profiles

6 REVISION HISTORY

The following major modifications and improvements have been made to the first version of this document:

No	Editor	Major Changes
V0.10	GT	Initial EnOcean Alliance Version created, based on the EnOcean GmbH document "Standardization EnOcean Communication Profiles_v1.04"
V0.90	TR	EEP for ORG = 0x05 added EEP for ORG = 0x06 added Headlines and Text formatted
V0.91	TR	FUNC = 11 "Controller Status" added Proposals added: EEP 07-11-01 "Lightning Controller" (EchoFlex) EEP 07-02-0C "Temp.Sensor, Window Contact" (EchoFlex) EEP 07-10-0A "Temp. Sensor, Set-Point Adj., Window Contact" (EchoFlex) EEP 07-30-02 "Window Contact, Single Input" (EchoFlex)
V0.92	TR	Manufacturer ID: Guidelines added. Definitions updated Revision History moved to a separate document chapter INPUT document for Berlin Meeting April 2009
V2.0R	TR	EEP 07-02-0C shifted to Room Operating Panels → EEP 07-10-0B EEP 06-00-00 renamed to 06-00-01 EEP 05-xx-xx (PRS telegram / PTM200) updated with results of latest discussions EEP 05-04-01 (Key Card Activated Switch) updated Proposals Added: EEP 07-10-0C "Temp. Sensor, Occupancy Control" (Termokon) EEP 07-10-0D "Temp. Sensor, Day/Night Control" (Termokon) Ratification info and period added
V2.0	TR	Creation of final Version V2.0 Document date set to July 2009 EEP 05-03-02 added EEP 05-04-01 corrected EEP 06-00-01 renamed → Single Input Contact EEP 07-10-0A and EEP 07-10-0B updated → Single Input Contact EEP 07-30-01 and EEP 07-30-02 updated → Single Input Contact 4BS teach in Telegram updated → FUNC /TYPE Editorial corrections