



**Automations- und  
Steuerungstechnik GmbH**

# **enocean EIB gateway**



**RF-receiver and gateway to EIB**

**Order number: E001-H023000**



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This handbook describes also functions, which are options.  
Only qualified persons are allowed to install our units.

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## **Highlights enocean-EIB-Gateway**

- Connects battery-less RFsensors to the EIB, no additional wiring needed
- Expands the EIB with wireless sensors
- Graceful designed housing
- Supports all enocean-Sensoren (Buttons, Windowcontacts, Temperature...)
- supports switching, dimming, temperature adjust, shutters, central functions...
- Easy integration into existing EIB systems
- contains RF-receiver and integrated EIB-bus-coupler
- no ETS required to parametrize the device

## **Fields of application**

- Expansion of the EIB without additional wiring
- Use of the EIB in buildings with moveable walls.
- Use of the EIB in historical buildings where no additional wiring is allowed.
- EIB-functions independent of fix mounted pushbuttons
- Individual controlling of rooms with removeable walls
- Pushbuttons mountable even on Glass surfaces

## **Contents of delivery**

- enocean-EIB-gateway with integrated EIB-Buscoupler
- software for parametrization
- Documentation



## Introduction

As sensors may be used buttons (e.g. from PEHA or Omnio), temperaturesensors (e.g. from Thermokon), glass break detectors and many more. Those sensors dont need a battery, the needed energy is generated by pressing the button or by solarcells. The enocean-EIB-gateway allows switching, dimming, shutters, temperature and brightness-measurement.

## Technical datas enocean-EIB-gateway

|                                      |  |
|--------------------------------------|--|
| Main voltage:                        | no external energy required  |
| Fitting:                             | round, 110mm   |
| Number of supported enocean-devices: | 50   |
| Number of group addresses:           | max 256, depends on datatypes  |
| Supported EIS-Types:                 | Switching, dimming, shutter control,<br>temperature, text, setpoint values ... |
| Cascading of enocean-EIB-Sensors:    | max 32767 (EIB-Limit)  |



## **enocan-EIB-gateway view**





## enocean-EIB-gateway connectors



|    |                                      |
|----|--------------------------------------|
| E1 | EIB-programming LED                  |
| K1 | EIB-program key for physical address |
| X1 | EIB-connector                        |
| E2 | EIB telegram LED                     |
| E3 | enocean receive LED (RF receiver)    |
| E4 | Supply LED (power supply)            |



## **Software to configure the enocean-EIB-Gateway**

The device needs to know what sensors and switch modules it has to handle. This parameters have to get defined and downloaded using the included software. Each enocean-device has a build-in unique ID number, so this ID is important to identify each device.

### **1) Getting the enocean device ID**

Before you can start to parametrize the gateway, you will need to know all the IDs of all enocean-devices you want to use. Some vendors are putting a label on each device, showing the device type and the device ID. If there is no label or documentation available, it is possible to detect the device ID by using the enocean-EIB-gateway and the EIBDoktor or ETS software.

The gateway needs to be in “transparent mode” to give informations about enocean-devices. You can start the transparent mode by pushing the EIB-programming button of the gateway twice in a row. Now the EIB programming LED of the gateway (red LED beneath the EIB connector) should be slowly flashing.

If you have the full EIBDoctor software version 1.0.30, you can now see all device infos in the “New device” window of the enocean-EIB-gateway configuration (see next chapter), whenever your enocean device is sending its data. If you only have the ETS or a different EIB tool, you can extract the device information by the gateway’s EIB telegram yourself:

Send data from you enocean device, by simply pushing a switch (switch module) or pushing the learning button (sensors). The gateway will receive this data, and write informations to the EIB, at group address 15/7/255 – a 14 byte telegram with the following content:

Byte 1 =     device type, (Enocean ORG)  
              05 = Switch module („Button PTM 100“)  
              06 = 1 byte sensor  
              07 = 4 byte sensor  
              08 = Remote Control

Byte 2 =     DeviceID 3, highest byte  
Byte 3 =     DeviceID 2  
Byte 4 =     DeviceID 1  
Byte 5 =     DeviceID 0, lowest byte



Byte 6 =      00 – with all sensors,  
                 with switch moduls/remote control devices:  
                 00 – no button pushed  
                 A0 – button A0 pushed (left top)  
                 A1 – button A1 pushed (left bottom)  
                 B0 – button B0 pushed  
                 B1 – button B1 pushed  
                 C0 – button C0 pushed  
                 C1 – button C1 pushed  
                 D0 – button D0 pushed (right top)  
                 D1 – button D1 pushed (right bottom)

If the switch module does not have 8 switch buttons, just a few selected channels from A0..D1 will be available.

Bytes 7..10 =hexadecimal data bytes send by the enocean device

Bytes 11..14 = BCD coded serial number of the enocean gateway

This EIB telegram can be displayed from either the EIBDoktor software or the ETS software.

If you configure the EIBDoktor software to display this group addresses with „No EIS type“ and „hexadecimal“, you will see the telegram in the row „data“ as described above:

For example:

05 00 04 92 1D B0 70 00 00 00 03 60 80 11

Switch module, ID 0004921D, button B0 pushed, gateway SN 03608011

06 00 00 00 56 00 08 00 00 00 03 60 80 11

1 Byte Sensor, ID 00000056, gateway SN 03608011

07 00 00 0C 12 00 E1 7D 5C 0F 03 60 80 11

4 Byte Sensor, ID 00000C12, gateway SN 03608011

In the ETS3 software you can use the „telegram monitor“ function to get the same information, it will be displayed in the „data“ field.



If you only have an ETS2 software, you have to log the telegrams in the bus monitor mode, and display it afterwards.

After you have found out all of your device IDs, please reset the enocean gateway back into its standard mode, again by pushing the programming button twice.

## 2) Device definition

The EIBDoktor software (version 1.0.28 or newer) has a special configuration window for the enocean gateway. Even if you don't have an EIBDoktor hardware (and therefore no access to the EIB), you can use the software to define all gateway parameters. You can download the EIBDoktor software from our page [www.bb-steuerungstechnik.de](http://www.bb-steuerungstechnik.de), section „downloads”.

The configuration window can be reached by selecting the menuitems „Options“ -> „ENOCEAN Gateway...”

Now the configuration window will appear. In the upper part of the window you have to enter the serialnumber of the gateway (you can see it on the gateway after removing the gateway case bottom by turning it leftside - or of course simply learn it from the information telegram), as well as the physical address you want to use with the gateway and a group address which will get used while configuring the gateway.

| enocean-EIB-Gateway |          |                |         |            |        |
|---------------------|----------|----------------|---------|------------|--------|
| GW serialno.:       | 03608011 | Phys. address: | 1.1.200 | Param. GA: | 15/5/5 |

The parametrizing group address is by default 15/5/5, usually you do not need to change it.

The listbox in the main area of the window will display all defined devices and related device channels of one enocean gateway. By using the “New device” button you can define up to 50 enocean-devices, and (depending on the device type) up to 8 channels with different functions, values and groupaddresses (button “New channel...”).



### New device...:

You have to enter here the device ID and to select a device type. You can also optionally enter a comment which will be displayed in the device list.

The following device types are available:

- Button PTM 100
- STM1 Sensor 1 Byte
- STM4 Sensor 4 Byte
- Remote Control

If you do not know the device ID or the device type, and you have the EIB Doctor software 1.0.30 (or newer), you can use the device information list at the bottom of the window: it will list all informations received in transparent mode of the enocean-EIB gateway, and you can simply double click an entry to use this information (ID and type). For more details about the transparent mode, see the previous chapter.

### Delete device...:

You can delete a selected device (and all of its channels) by pushing this button.

### Change device...:

Here you can change the device ID, the comment and/or the device type of a selected device.



## New channel...:

If you have a „Button PTM 100“ or „Remote Control“ device, you can define up to 8 channels (A0,A1,B0,B1,C0,C1,D0 and D1).

Each channel can have one of the following functions:

### 1) "Push => Off (1Bit, EIS10, KNX 1.001), Release => no action"

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „0“ to the entered group address on the EIB.

### 2) "Push => On (1Bit, EIS10, KNX 1.001), Release => no action"

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „1“ to the entered group address on the EIB.



**3) "Push => Toggle Off/On (1Bit, EIS10, KNX 1.001), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Toggle Off/On (1Bit, EIS10, KNX 1.001), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „0“ or „1“, always toggling between this two values, to the entered group address on the EIB.

**4) "Push => On; Release => Off (1Bit, EIS10, KNX 1.001)"**

enocean channel...

Channel: A1

Function: Push => On; Release => Off (1Bit, EIS10, KNX 1.001)

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „1“ to the entered group address on the EIB, and if the button gets released the value „0“ will be sent.

**5) "Push => Off; Release => On (1Bit, EIS10, KNX 1.001)"**

enocean channel...

Channel: A1

Function: Push => Off; Release => On (1Bit, EIS10, KNX 1.001)

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „0“ to the entered group address on the EIB, and if the button gets released the value „1“ will be sent.





**6) "Dimming: Push => Up (1..7); Release => Stop (4Bit, EIS20, KNX 3.007)"**

enocean channel...

Channel: A1

Function: Dimming: Push => Up (1..7); Release => Stop (4Bit, EIS20, KNX 3.007)

Group address 1: 00/0/001

Value: 5

OK Cancel

- By pushing the enocean button the gateway will send a „four bit dimming up“ telegram with the given value to the entered group address on the EIB. The dimming is controlled by the value in the following way:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

By releasing the button the gateway will send a „dimming stop“ telegram.

**7) "Dimming: Push => Down (1..7); Release => Stop (4Bit, EIS20, KNX 3.007)"**

enocean channel...

Channel: A1

Function: Dimming: Push => Down (1..7); Release => Stop (4Bit, EIS20, KNX 3.007)

Group address 1: 00/0/001

Value: 5

OK Cancel

- By pushing the enocean button the gateway will send a „four bit dimming down“ telegram with the given value to the entered group address on the EIB. The dimming is controlled by the value in the following way:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

By releasing the button the gateway will send a „dimming stop“ telegram.





**8) "Dimming: Short => On; Long => Up; Rel. => Stop (1Bit, EIS10, KNX 1.001/4Bit, EIS20, KNX 3.007)"**

- By doing a short push the gateway will send an „one bit On“ telegram to the first groupaddress.

By doing a long push (> 0.8 seconds) a „four bit dimming up“ telegram will be send to the second groupaddress with the given dimming value:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

By releasing the button the gateway will send a „dimming stop“ telegram.

**9) "Dimming: Short => Off; Long => Dn; Rel. => Stop (1Bit, EIS10, KNX 1.001/4Bit, EIS20, KNX 3.007)"**

- By doing a short push the gateway will send an „one bit Off“ telegram to the first groupaddress.

By doing a long push (> 0.8 seconds) a „four bit dimming down“ telegram will be send to the second groupaddress with the given dimming value:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

By releasing the button the gateway will send a „dimming stop“ telegram.



**10) "Dimming: Push => Up (1..7); Release => no action (4Bit, EIS20, KNX 3.007)"**

- By pushing the enocean button the gateway will send a „four bit dimming up“ telegram with the given value to the entered group address on the EIB. The dimming is controlled by the value in the following way:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

**11) "Dimming: Push => Down (1..7); Release => no action (4Bit, EIS20, KNX 3.007)"**

- By pushing the enocean button the gateway will send a „four bit dimming down“ telegram with the given value to the entered group address on the EIB. The dimming is controlled by the value in the following way:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.



**12) "Dimming: Short => On; Long => Up; Rel. => no action (1Bit, EIS10, KNX 1.001/4Bit, EIS20, KNX 3.007)"**

Channel: A1

Function: Dimming: Short => On; Long => Up; Rel. => no action (1Bit, EIS10, KNX 1.001/4Bit, EIS20, KNX 3.007)

Group address 1: 00/0/001

Group address 2: 00/0/002

Value: 5

OK Cancel

- By doing a short push the gateway will send an „one bit On“ telegram to the first groupaddress.

By doing a long push (> 0.8 seconds) a „four bit dimming up“ telegram will be send to the second groupaddress with the given dimming value:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

**13) "Dimming: Short => Off; Long => Down; Rel. => no action (1Bit, EIS10, KNX 1.001/4Bit, EIS20, KNX 3.007)"**

Channel: A1

Function: Dimming: Short => Off; Long => Down; Rel. => no action (1Bit, EIS10, KNX 1.001/4Bit, EIS20, KNX 3.007)

Group address 1: 00/0/001

Group address 2: 00/0/002

Value: 5

OK Cancel

- By doing a short push the gateway will send an „one bit Off“ telegram to the first groupaddress.

By doing a long push (> 0.8 seconds) a „four bit dimming down“ telegram will be send to the second groupaddress with the given dimming value:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.



**14) "Dimming: Push => Up(9..15)/Down(1..7)/Stop(0/8); Release => no action (4Bit, EIS20, KNX 3.007)"**

Channel: A1

Function: Dimming: Push => Up(9..15)/Down(1..7)/Stop(0/8); Release => no action (4Bit, EIS20, KNX 3.007)

Group address 1: 00/0/001

Value: 5

OK Cancel

- By pushing the enocean button the gateway will send a „four bit dimming“ telegram with the given value to the entered group address on the EIB. The dimming is controlled by the value in the following way:

Down: 1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

Up: 9 = 0,5 %, 10 = 1%, 11 = 3%, 12 = 6%, 13 = 12%, 14 = 25%, 15 = 50%.

Stop: 0 or 8

**15) "Dimming: Push => Brightness (0..255), (8Bit, EIS14000, KNX5.010 not scaled)"**

Channel: A1

Function: Dimming: Push => Brightness (0..255), (8Bit, EIS14000, KNX5.010 not scaled)

Group address 1: 00/0/001

Value: 128

OK Cancel

- By pushing the enocean button the gateway will send an „one byte “ telegram with the given brightness value to the entered group address on the EIB.

**16) "Jalousie: Push => Up; Release => Stop (1Bit, EIS10, KNX 1.010)"**

Channel: A1

Function: Jalousie: Push => Up; Release => Stop (1Bit, EIS10, KNX 1.010)

Group address 1: 00/0/001

Group address 2: 00/0/002

OK Cancel

- By pushing the enocean button the gateway will send an „one bit Up“ telegram to the first group address. By releasing the button the gateway will send a stop telegram to the second groupaddress.



**17) "Jalousie: Push => Down; Release => Stop (1Bit, EIS10, KNX 1.010)"**

enocean channel...

Channel: A1

Function: Jalousie: Push => Down; Release => Stop (1Bit, EIS10, KNX 1.010)

Group address 1: 00/0/001

Group address 2: 00/0/002

OK Cancel

- By pushing the enocean button the gateway will send an „one bit Down“ telegram to the first group address. By releasing the button the gateway will send a stop telegram to the second groupaddress.

**18) "Jalousie: Short => Lam.up; Long => Jal.up; Rel.(long) => Stop (1Bit, EIS10, KNX 1.010)"**

enocean channel...

Channel: A1

Function: Jalousie: Short => Lam.up; Long => Jal.up; Rel.(long) => Stop (1Bit, EIS10, KNX 1.010)

Group address 1: 00/0/001

Group address 2: 00/0/002

OK Cancel

- By doing a short push the gateway will send an „one bit Open“ telegram to the second groupaddress.

By doing a long push (> 0.8 seconds) an „one bit move up “ telegram will be send to the first groupaddress. If a long push gets released, a stop telegram will be send to the second groupaddress.



**19) "Jalousie: Short => Lam.dn; Long => Jal.dn; Rel.(long) => Stop (1Bit, EIS10, KNX 1.010)"**

enocean channel...

Channel: A1

Function: Jalousie: Short => Lam.dn; Long => Jal.dn; Rel.(long) => Stop (1Bit, EIS10, KNX 1.010)

Group address 1: 00/0/001

Group address 2: 00/0/002

OK Cancel

- By doing a short push the gateway will send an „one bit Close“ telegram to the second groupaddress.

By doing a long push (> 0.8 seconds) an „one bit move down“ telegram will be send to the first groupaddress. If a long push gets released, a stop telegram will be send to the second groupaddress.

**20) "Jalousie: Short => Lam.up; Long => Jal.up; Release => no action (1Bit, EIS10, KNX 1.010) "**

enocean channel...

Channel: A1

Function: Jalousie: Short => Lam.up; Long => Jal.up; Release => no action (1Bit, EIS10, KNX 1.010)

Group address 1: 00/0/001

Group address 2: 00/0/002

OK Cancel

- By doing a short push the gateway will send an „one bit Open“ telegram to the second groupaddress.

By doing a long push (> 0.8 seconds) an „one bit move up “ telegram will be send to the first groupaddress.



**21) "Jalousie: Short => Lam.dn; Long => Jal.dn; Release => no action (1Bit, EIS10, KNX 1.010)"**

enocean channel...

Channel: A1

Function: Jalousie: Short => Lam.dn; Long => Jal.dn; Release => no action (1Bit, EIS10, KNX 1.010)

Group address 1: 00/0/001

Group address 2: 00/0/002

OK Cancel

- By doing a short push the gateway will send an „one bit Close“ telegram to the second groupaddress.

By doing a long push (> 0.8 seconds) an „one bit move down“ telegram will be send to the first groupaddress.

**22) "Jalousie Step: Push => Up (1..7); Release => Stop (4Bit, EIS20, KNX 3.008)"**

enocean channel...

Channel: A1

Function: Jalousie Step: Push => Up (1..7); Release => Stop (4Bit, EIS20, KNX 3.008)

Group address 1: 00/0/001

Value: 5

OK Cancel

- By pushing the enocean button the gateway will send a „four bit step up“ telegram with the given value to the entered group address on the EIB. The stepping is controlled by the value in the following way:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

By releasing the button the gateway will send a „stop“ telegram.



**23) "Jalousie Step: Push => Down (1..7); Release => Stop (4Bit, EIS20, KNX 3.008)"**

enocean channel...

Channel: A1

Function: Jalousie Step: Push => Down (1..7); Release => Stop (4Bit, EIS20, KNX 3.008)

Group address 1: 00/0/001

Value: 5

OK Cancel

- By pushing the enocean button the gateway will send a „four bit step down“ telegram with the given value to the entered group address on the EIB. The stepping is controlled by the value in the following way:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

By releasing the button the gateway will send a „stop“ telegram.

**24) "Jalousie Step: Push => Up (1..7); Release => no action (4Bit, EIS20, KNX 3.008)"**

enocean channel...

Channel: A1

Function: Jalousie Step: Push => Up (1..7); Release => no action (4Bit, EIS20, KNX 3.008)

Group address 1: 00/0/001

Value: 5

OK Cancel

- By pushing the enocean button the gateway will send a „four bit step up“ telegram with the given value to the entered group address on the EIB. The stepping is controlled by the value in the following way:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.





**25) "Jalousie Step: Push => Down (1..7); Release => no action (4Bit, EIS20, KNX 3.008)"**

The screenshot shows a dialog box titled "enocean channel...". It contains the following fields:  
- Channel: A dropdown menu showing "A1".  
- Function: A dropdown menu showing "Jalousie Step: Push => Down (1..7); Release => no action (4Bit, EIS20, KNX 3.008)".  
- Group address 1: A text box containing "00/0/001".  
- Value: A text box containing "5".  
On the right side, there are "OK" and "Cancel" buttons.

- By pushing the enocean button the gateway will send a „four bit step down“ telegram with the given value to the entered group address on the EIB. The stepping is controlled by the value in the following way:

1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

**26) "Jalousie Step: Push => Up(9..15)/Down(1..7)/Stop(0/8); Release => no action (4Bit, EIS20, KNX 3.008)"**

The screenshot shows a dialog box titled "enocean channel...". It contains the following fields:  
- Channel: A dropdown menu showing "A1".  
- Function: A dropdown menu showing "Jalousie Step: Push => Up(9..15)/Down(1..7)/Stop(0/8); Release => no action (4Bit, EIS20, KNX 3.008)".  
- Group address 1: A text box containing "00/0/001".  
- Value: A text box containing "5".  
On the right side, there are "OK" and "Cancel" buttons.

- By pushing the enocean button the gateway will send a „four bit step“ telegram with the given value to the entered group address on the EIB. The stepping is controlled by the value in the following way:

Down: 1 = 0,5 %, 2 = 1%, 3 = 3%, 4 = 6%, 5 = 12%, 6 = 25%, 7 = 50%.

Up: 9 = 0,5 %, 10 = 1%, 11 = 3%, 12 = 6%, 13 = 12%, 14 = 25%, 15 = 50%.

Stop: 0 or 8



**27) "Jalousie Step: Push => Position (0..255), (8Bit, EIS14000, KNX5.010 no scaled)"**

enocean channel...

Channel: A1

Function: Jalousie Step: Push => Position (0..255), (8Bit, EIS14000, KNX5.010 no scaled)

Group address 1: 00/0/001

Value: 128

OK Cancel

- By pushing the enocean button the gateway will send an „one byte “ telegram with the given position value to the entered group address on the EIB.

**28) "Analog: Push => 1 byte value (0..255), (8Bit without sign, EIS14, KNX 5.010)"**

enocean channel...

Channel: A1

Function: Analog: Push => 1 byte value (0..255), (8Bit without sign, EIS14, KNX 5.010)

Group address 1: 00/0/001

Value: 128

OK Cancel

- By pushing the enocean button the gateway will send an „one byte “ telegram with the given value to the entered group address on the EIB.

**29) "Analog: Push => 2 byte value (0..65535), (16Bit without sign, EIS10000, KNX 7.001)"**

enocean channel...

Channel: A1

Function: Analog: Push => 2 byte value (0..65535), (16Bit without sign, EIS10000, KNX 7.001)

Group address 1: 00/0/001

Value: 33000

☒ Integer ☐ Floating point

OK Cancel

- By pushing the enocean button the gateway will send a „two byte “ telegram with the given value to the entered group address on the EIB. The value has to be an integer (16 bit value).



**30) "Analog: Push => 2 byte value floating point, (with sign, EIS50xx, KNX 9.0xx)"**

Channel: A1

Function: Analog: Push => 2 byte value floating point, (with sign, EIS50xx, KNX 9.0xx)

Group address 1: 00/0/001

Value: 2,5 ☐ Integer ☒ Floating point

OK Cancel

- By pushing the enocean button the gateway will send a „two byte “ telegram with the given value to the entered group address on the EIB. The value has to be a floating point number (EIS 5 data type).

**31) "Analog: Push => 4 byte value (32Bit without sign, EIS11000, KNX 12.001)"**

Channel: A1

Function: Analog: Push => 4 byte value

Group address 1: 00/3/003

Value: 12344.368 ☐ Integer ☒ Floating point

OK Cancel

- By pushing the enocean button the gateway will send a „four byte “ telegram with the given value to the entered group address on the EIB. The value has to be an integer (32 bit value).

**32) "Analog: Push => 4 byte value floating point, (with sign, EIS90xx, KNX 14.xxx)"**

Channel: A1

Function: Analog: Push => 4 byte value floating point, (with sign, EIS90xx, KNX 14.xxx)

Group address 1: 00/0/001

Value: 100,5 ☐ Integer ☒ Floating point

OK Cancel

- By pushing the enocean button the gateway will send a „four byte “ telegram with the given value to the entered group address on the EIB. The value has to be a floating point number (IEEE data type).



**33) "Text: Push => Text (1..14 characters), (KNX 16.00x)"**

enocean channel...

Channel: A1

Function: Text: Push => Text (1..14 characters), (KNX 16.00x)

Group address 1: 00/0/001

Value: TEST

OK Cancel

- By pushing the enocean button the gateway will send the given text as a telegram to the entered group address on the EIB. The telegram length is dependant on the text length!

**34) "Text: Push => Text (10 characters), (filled with spaces up to 10 chars, KNX 16.00x)"**

enocean channel...

Channel: A1

Function: Text: Push => Text (10 characters), (filled with spaces up to 10 chars, KNX 16.00x)

Group address 1: 00/0/001

Value: TEST

OK Cancel

- By pushing the enocean button the gateway will send the given text as a "10 byte" telegram to the entered group address on the EIB. If the given text is smaller than ten bytes, it will be filled with space characters.

**35) "Text: Push => Text (14 characters), (filled with spaces up to 14 chars,EIS15000, KNX 16.00x)"**

enocean channel...

Channel: A1

Function: Text: Push => Text (14 characters), (filled with spaces up to 14 chars,EIS15000, KNX 16.00x)

Group address 1: 00/0/001

Value: TEST

OK Cancel

- By pushing the enocean button the gateway will send the given text as a "14 byte" telegram to the entered group address on the EIB. If the given text is smaller than fourteen bytes, it will be filled with space characters.



**36) "Push => Lock (1Bit, EIS10, KNX 1.003), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Lock (1Bit, EIS10, KNX 1.003), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit lock“ telegram with the value „0“ to the entered group address on the EIB.

**37) "Push => Unlock (1Bit, EIS10, KNX 1.003), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Unlock (1Bit, EIS10, KNX 1.003), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit unlock“ telegram with the value „1“ to the entered group address on the EIB.

**38) "Push => Toggle unlock/lock (1Bit, EIS10, KNX 1.003), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Toggle unlock/lock (1Bit, EIS10, KNX 1.003), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „lock“ or „unlock“, always toggling between this two values, to the entered group address on the EIB.



**39) "Push => Unlock; Release => Lock (1Bit, EIS10, KNX 1.003)"**

enocean channel...

Channel: A1

Function: Push => Unlock; Release => Lock (1Bit, EIS10, KNX 1.003)

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „unlock“ to the entered group address on the EIB, and if the button gets released the value “lock” will be sent.

**40) "Push => Lock; Release => Unlock (1Bit, EIS10, KNX 1.003)"**

enocean channel...

Channel: A1

Function: Push => Lock; Release => Unlock (1Bit, EIS10, KNX 1.003)

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „lock“ to the entered group address on the EIB, and if the button gets released the value “unlock” will be sent.

**41) "Push => Up (1Bit, EIS10, KNX 1.008), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Up (1Bit, EIS10, KNX 1.008), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit up“ telegram with the value „0“ to the entered group address on the EIB.



**42) "Push => Down (1Bit, EIS10, KNX 1.008), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Down (1Bit, EIS10, KNX 1.008), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit down“ telegram with the value „1“ to the entered group address on the EIB.

**43) "Push => Toggle up/down (1Bit, EIS10, KNX 1.008), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Toggle up/down (1Bit, EIS10, KNX 1.008), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „up“ or „down“, always toggling between this two values, to the entered group address on the EIB.

**44) "Push => Down; Release => Up (1Bit, EIS10, KNX 1.008)"**

enocean channel...

Channel: A1

Function: Push => Down; Release => Up (1Bit, EIS10, KNX 1.008)

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „down“ to the entered group address on the EIB, and if the button gets released the value „up“ will be sent.



**45) "Push => Up; Release => Down (1Bit, EIS10, KNX 1.008)"**

enocean channel...

Channel: A1

Function: Push => Up; Release => Down (1Bit, EIS10, KNX 1.008)

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „up“ to the entered group address on the EIB, and if the button gets released the value “down” will be sent.

**46) "Push => Start (1Bit, EIS10, KNX 1.010), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Start (1Bit, EIS10, KNX 1.010), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit start“ telegram with the value „1“ to the entered group address on the EIB.

**47) "Push => Stop (1Bit, EIS10, KNX 1.010), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Stop (1Bit, EIS10, KNX 1.010), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit stop“ telegram with the value „0“ to the entered group address on the EIB.





**48) "Push => Toggle Start/Stop (1Bit, EIS10, KNX 1.010), Release => no action"**

enocean channel...

Channel: A1

Function: Push => Toggle Start/Stop (1Bit, EIS10, KNX 1.010), Release => no action

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „start“ or „stop“, always toggling between this two values, to the entered group address on the EIB.

**49) "Push => Start; Release => Stop (1Bit, EIS10, KNX 1.010)"**

enocean channel...

Channel: A1

Function: Push => Start; Release => Stop (1Bit, EIS10, KNX 1.010)

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „start“ to the entered group address on the EIB, and if the button gets released the value „stop“ will be sent.

**50) "Push => Stop; Release => Start (1Bit, EIS10, KNX 1.010)"**

enocean channel...

Channel: A1

Function: Push => Stop; Release => Start (1Bit, EIS10, KNX 1.010)

Group address 1: 00/0/001

OK Cancel

- By pushing the enocean button the gateway will send an „one bit“ telegram with the value „stop“ to the entered group address on the EIB, and if the button gets released the value „start“ will be sent.



The „STM1 Sensor 1 Byte“ enocean device has following functions:

**1) "Transparent: 0..255 => 0..255, (8Bit, EIS14000, KNX5.010 not scaled)"**

enocean channel...

Function: Transparent: 0..255 => 0..255, (8Bit, EIS14000, KNX5.010 not scaled)

Group address: 00/0/001

OK Cancel

- The received value will be send as „one byte“ telegram to the entered group address.

**2) "Digital: xxxxxxx0=>0; xxxxxxx1=>1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)"**

enocean channel...

Function: Digital: xxxxxxx0=>0; xxxxxxx1=>1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)

Group address: 00/0/001

OK Cancel

- The lowest bit of the received value will be send as „one bit“ telegram to the entered group address.

Note: window contacts of type STM250 are sending the information „window closed“ in this format.

**3) "Digital: xxxxxxx0=>1; xxxxxxx1=>0 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)"**

enocean channel...

Function: Digital: xxxxxxx0=>1; xxxxxxx1=>0 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)

Group address: 00/0/001

OK Cancel

- The inverted lowest bit of the received value will be send as „one bit“ telegram to the entered group address.

Note: window contacts of type STM250 are sending the information „window opened“ in this format.

**4) "Digital: 0..127 => 0; 128..255 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)"**

enocean channel...

Function: Digital: 0..127 => 0; 128..255 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)

Group address: 00/0/001

OK Cancel

- If the received value is smaller than 128, an „one bit Off“ telegram will be send to



the given groupaddress. Is he value greater or equal 128, an „one bit On“ telegram will be send to the given groupaddress

## 5) "Digital: 0..127 => 1; 128..255 => 0 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)"

Function: Digital: 0..127 => 1; 128..255 => 0 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)

Group address: 00/0/001

OK Cancel

- If the received value is smaller than 128, an „one bit On“ telegram will be send to the given groupaddress. Is he value greater or equal 128, an „one bit Off“ telegram will be send to the given groupaddress

## 6) "Digital: 0..31 => 0; 32..63 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)"

Function: Digital: 0..31 => 0; 32..63 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)

Group address: 00/0/001

OK Cancel

- If the received value is in the range 0..31, an „one bit Off“ telegram will be send to the given groupaddress.

If the received value is in the range 32..63, an „one bit On“ telegram will be send to the given groupaddress.

## 7) "Digital: 64..95 => 0; 96..127 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)"

Function: Digital: 64..95 => 0; 96..127 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)

Group address: 00/0/001

OK Cancel

- If the received value is in the range 64..95, an „one bit Off“ telegram will be send to the given groupaddress.

If the received value is in the range 96..127, an „one bit On“ telegram will be send to the given groupaddress.

## 8) "Digital: 128..159 => 0; 160..191 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)"

Function: Digital: 128..159 => 0; 160..191 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)

Group address: 00/0/001

OK Cancel



- If the received value is in the range 128..159, an „one bit Off“ telegram will be send to the given groupaddress.

If the received value is in the range 160..191, an „one bit On“ telegram will be send to the given groupaddress.

**9) "Digital: 192..223 => 0; 224..255 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)"**

enocean channel...

Function: Digital: 192..223 => 0; 224..255 => 1 (8Bit => 1 Bit), (1Bit, EIS10, KNX1.010)

Group address: 00/0/001

OK Cancel

- If the received value is in the range 192..223, an „one bit Off“ telegram will be send to the given groupaddress.

If the received value is in the range 224..255, an „one bit On“ telegram will be send to the given groupaddress.

Note: the functions 6 – 9 are used for various motion sensors.

**10) "Analog: 0..255 => 40°..0°, (signed, EIS5001, KNX 9.001)"**

enocean channel...

Function: Analog: 0..255 => 40°..0°, (signed, EIS5001, KNX 9.001)

Group address: 00/0/001

OK Cancel

- The received value will be converted to an EIS5 floating point value, and send as a “two byte float” telegram to the given groupaddress.

Value 0 = 40.0 °Celsius, value 255 = 0.0 °Celsius.

**11) "Analog: 0..250 => 0°..40°, (signed, EIS5001, KNX 9.001)"**

- The received value will be converted to an EIS5 floating point value, and send as a “two byte float” telegram to the given groupaddress.

Value 0 = 0.0 °Celsius, value 250 = 40.0 °Celsius.

**12) "Analog: 0..255 => 60°..-20°, (signed, EIS5001, KNX 9.001)"**

- The received value will be converted to an EIS5 floating point value, and send as a “two byte float” telegram to the given groupaddress.

Value 0 = 60.0 °Celsius, value 255 = -20.0 °Celsius.



**13) "Analog: 0..255 => 90°..10°, (signed, EIS5001, KNX 9.001)"**

- The received value will be converted to an EIS5 floating point value, and send as a "two byte float" telegram to the given groupaddress.

Value 0 = 90.0 °Celsius, value 255 = 10.0 °Celsius.

**14) "Analog: 0..255 => 3 lux..300 lux, (signed, EIS5004, KNX 9.004)"**

- The received value will be converted to an EIS5 floating point value, and send as a "two byte float" telegram to the given groupaddress.

Value 0 = 3.0 lux, value 255 = 300.0 lux.

**15) "Analog: 0..255 => 30 lux..3000 lux, (signed, EIS5004, KNX 9.004)"**

- The received value will be converted to an EIS5 floating point value, and send as a "two byte float" telegram to the given groupaddress.

Value 0 = 30.0 lux, value 255 = 3000.0 lux.

**16) "Analog: 0..255 => 300 lux..30000 lux, (signed, EIS5004, KNX 9.004)"**

- The received value will be converted to an EIS5 floating point value, and send as a "two byte float" telegram to the given groupaddress.

Value 0 = 300.0 lux, value 255 = 30000.0 lux.

**17) "Analog: 0..255 => 600 lux..60000 lux, (signed, EIS5004, KNX 9.004)"**

- The received value will be converted to an EIS5 floating point value, and send as a "two byte float" telegram to the given groupaddress.

Value 0 = 600.0 lux, value 255 = 60000.0 lux.



**18) "Analog: 0..255 => 0 lux..100000 lux, (signed, EIS5004, KNX 9.004)"**

- The received value will be converted to an EIS5 floating point value, and send as a "two byte float" telegram to the given groupaddress.

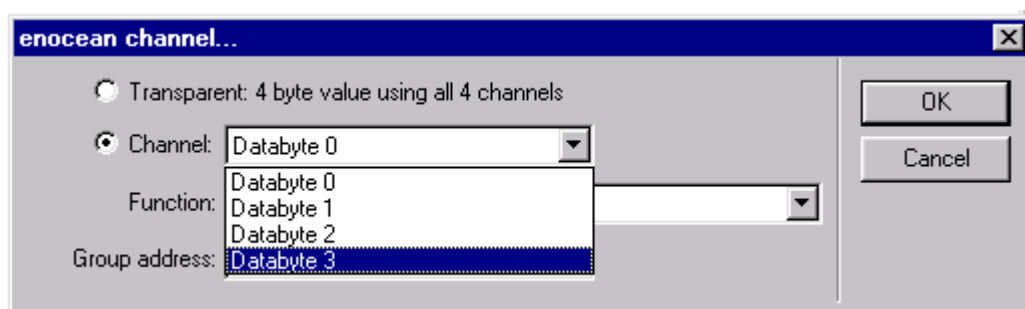
Value 0 = 0.0 lux, value 255 = 100000.0 lux.

**19) "Analog: 0..250 => 0%..100 %, (signed, EIS6001-2, KNX 5.001)"**

- The received value will be converted to an EIS5 floating point value, and send as a "two byte float" telegram to the given groupaddress.

Value 0 = 0 % (relative humidity), value 250 = 100.0 % (relative humidity).

The „STM4 Sensor 4 Byte“ enocean device has the same functions as the 1 byte sensors, but it contains up to 4 channels:



„Databyte 0“ .. „Databyte 3“.

You can see in the sensor documentation how the channels are used in your sensor.

There is also an alternative "transparent" option with the gateway, to send the received values (4 channels, each 1 byte) as a "four byte" telegram to the given groupaddress.



### Gateway usage:

Below the list the current usage of the gateway will be displayed in % :

|                |              |               |
|----------------|--------------|---------------|
| Gateway-Usage: | Devices: 2 % | Channels: 1 % |
|----------------|--------------|---------------|

Every device will take 2% of the gateway's device memory (therefore up to 50 devices can be handled with one gateway).

The channel memory usage depends on the channel function (estimated values):

Sensor channel : 0.4 %

Switch modul functions

1, 2, 4 : 0.4%

3, 5, 6, 13 : 0.5%

9, 10, 11, 12, 14 : 0.6%

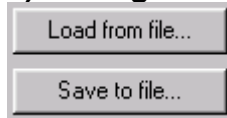
7, 8 : 0.7%

15 : 0.8%

16, 17, 18 : 0.5% .. 1.8%, depends on the text length



### 3) Saving and downloading the configuration



By using the „Save to file“ button all definitions will be saved into an „.EGT“ file. Also, saving the definitions will create a „.TEL“ file. Such TEL files can be used with the ETS2 or ETS3 to transfer the definitions into the gateway.

But of course it is easier to push the „Transfer to GW“ button (available if EIBWeiche is connected to the PC, and the EIBDoktor logging is started): all definitions will be immediately transferred to the gateway.