



REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

KNXnet/IP App Documentation

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1 INTRODUCTION

Thank you for your trust and the purchase of the **KNXnet/IP**-app for the BAB **APPMODULE** EnOcean. The KNXnet/IP APP enables the **APPMODULE** EnOcean to communicate between the EnOcean wireless bus system and the KNX bus. This is realized by the KNXnet/IP Routing protocol. This documentation will help you get started with the app and aims to improve your setup experience.

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IMPORTANT INFORMATION ON THE OPERATING INSTRUCTIONS

We reserve the right continually improve the product. This entails the possibility that parts of this documentation might be out-of-date. You will find the latest information at:

www.bab-appmarket.de

2 KNXET/IP – FUNCTIONAL OVERVIEW

This APP enables the **APPMODULE** in the EnOcean variant to communicate bi-directionally with an existing KNXnet/IP system.

Communication with KNX / TP bus can be achieved through an external KNX IP Router. The KNXnet/IP Routing protocol is used.

3 THE INNOVATIVE, MODULAR APP CONCEPT FOR BUILDING AUTOMATION

The innovative, modular app concept for building automation. The **APPMODULE** brings the innovative modular app concept into building automation. You can mix and match any of the diverse applications that are available to integrate third-party solutions. With these apps from the dedicated **BAB APP MARKET**, the **APPMODULE** becomes a tailor-made integration unit for your building automation.

HOW IT WORKS

**1****PURCHASE AN APPMODULE**

Purchase BAB TECHNOLOGIE's APP MODULE via a wholesaler.

**2****REGISTER**

Register your APP MODULE. Each app is bound to one device.

**3****LOAD APPS**

Buy and download your favorite apps for your APP MODULE..

**4****INSTALL YOU APPS**

Install your downloaded apps on your APP MODULE. You can start to configure your apps immediately.

Manufacturer of the **APPMODULE** [BAB TECHNOLOGIE GmbH](#)

Distribution of all apps for the **APPMODULE** [BAB APP MARKET GmbH](#)

App developer [REAL SMART HOME GmbH](#)

3.1 INFORMATION ABOUT THE APPMODULE

Please refer to the separate product documentation of the **APPMODULE** for a detailed product description and setup instructions.

http://www.bab-tec.de/index.php/download_de.html

The **APPMODULE** EnOcean internally operates with KNX group addresses to process the EnOcean telegrams.

This means that the received EnOcean telegrams are converted into KNX telegrams before they are further processed in the **APPMODULE**. According to the same principle, the KNXnet/IP telegrams received by the **APPMODULE** are converted to EnOcean wireless telegrams.

The addressing concept of the **APPMODULE** is based on the same principle as the KNX system for group addresses

The KNX group address is a 16bit address which is divided in a so-called **real** and **virtual** address space.

The KNX group addresses can be represented in a two-digit or three-digit representation:

3- digit:

- Structure: **HG** / **MG** / **UG**

2- digit:

- Structure: **HG** / **UG**

Abbreviation: **HG**= main group, **MG**= middle group, **UG**= under group

Note: The **APPMODULE** interface supports only the 3-digit representation.

Real / Virtual address space:

The KNX address space goes from 0/0/1 to 31/7/255 (in 3-digit representation). The address space up to 15/7/255 is referred to the real address space and the address space from 16/0/0 to 31/7/255 as virtual address space.

Note: Only the real address space is used for communication between the EnOcean and KNXnet/IP Routing.

3.2 CONFIGURE ENOCEAN DEVICE IN APP MODULE

To set up the communication between EnOcean and KNX, open the web interface of the **APPMODULE** EnOcean in your browser. Enter the IP address of the **APPMODULE** EnOcean in the address line of your browser (factory setting is 192.168.1.224) and confirm with Enter.

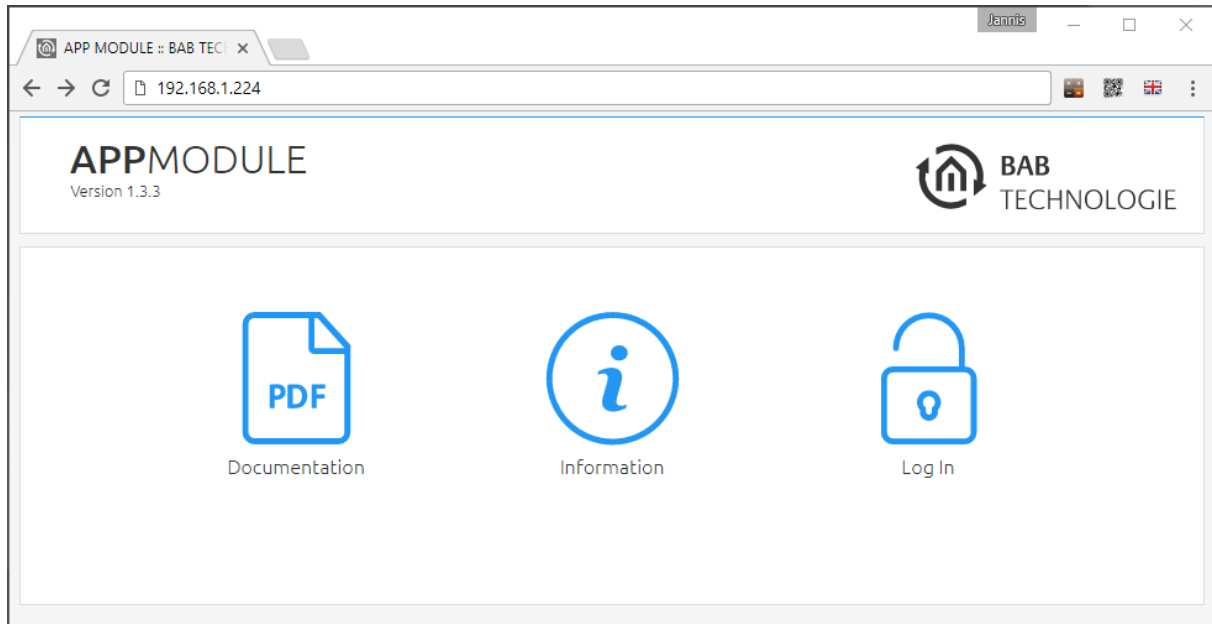


Figure 1: Login page of the APP MODULE

For a detailed description of the login procedure, please refer to the separate product documentation for the **APPMODULE**.

Below is the configuration window for EnOcean devices. The “EnOcean Editor” is accessed via the web interface under the “Configuration” menu.

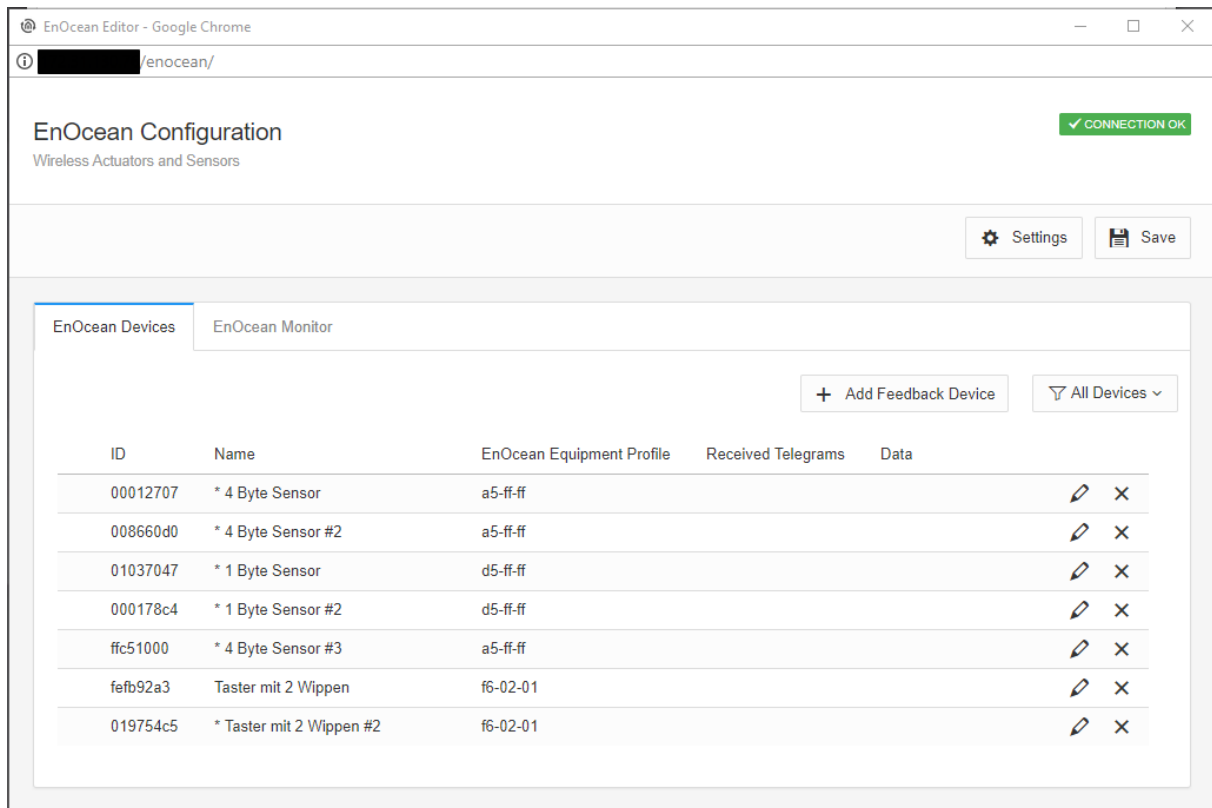


Figure 2: EnOcean Editor – device view

All EnOcean devices that are within range are displayed in the “device view” (tab “EnOcean devices”) as soon as they produce EnOcean traffic, as well as in the “telegram monitor” (tab “EnOcean monitor”). As mentioned above, every EnOcean device information must be linked to group addresses so they can be used in the **APPMODULE** and forwarded via KNXnet/IP routing.

The EnOcean device configuration is accessed via the pencil symbol in the line of the EnOcean device, which is to be configured.

The following figure shows the EnOcean Monitor.

The screenshot shows the 'EnOcean Configuration' interface in a web browser. The page title is 'EnOcean Configuration' with the subtitle 'Wireless Actuators and Sensors'. A green status bar indicates 'CONNECTION OK'. There are 'Settings' and 'Save' buttons. The 'EnOcean Monitor' tab is active, displaying a table of device events. The table has columns for Time, ID, Name, EnOcean Equipment Profile, and Data. The data shows multiple events for '2 Rocker Switch' devices and one event for '1 Byte Sensor #2'.

Time	ID	Name	EnOcean Equipment Profile	Data
15:14:29	00155b8e	2 Rocker Switch	f6-02-01	Pressed
15:14:29	00155b8e	2 Rocker Switch	f6-02-01	Rocker 1 "OFF" + Rocker 2 "OFF" Released
15:14:29	00155b8e	2 Rocker Switch	f6-02-01	Pressed
15:14:29	00155b8e	2 Rocker Switch	f6-02-01	Rocker 1 "OFF" Released
15:13:16	00155b8e	2 Rocker Switch	f6-02-01	Pressed
15:13:16	00155b8e	2 Rocker Switch	f6-02-01	Rocker 1 "OFF" + Rocker 2 "OFF" Released
15:13:16	00155b8e	2 Rocker Switch	f6-02-01	Pressed
15:13:16	00155b8e	2 Rocker Switch	f6-02-01	Rocker 1 "OFF" + Rocker 2 "OFF" Released
15:13:16	00155b8e	2 Rocker Switch	f6-02-01	Pressed
15:13:16	00155b8e	2 Rocker Switch	f6-02-01	Rocker 1 "OFF" + Rocker 2 "OFF" Released
15:13:15	00155b8e	2 Rocker Switch	f6-02-01	Pressed
15:13:15	00155b8e	2 Rocker Switch	f6-02-01	Rocker 1 "OFF" Released
15:12:58	000178c4	1 Byte Sensor #2	d5-ff-ff	Raw Data: 08-00-00-00

Figure 3: EnOcean Editor - Telegram Monitor

The next figure shows an example of an EnOcean device configuration (with linked KNX group addresses) of an EnOcean button in the EnOcean editor of the APPMODULE.

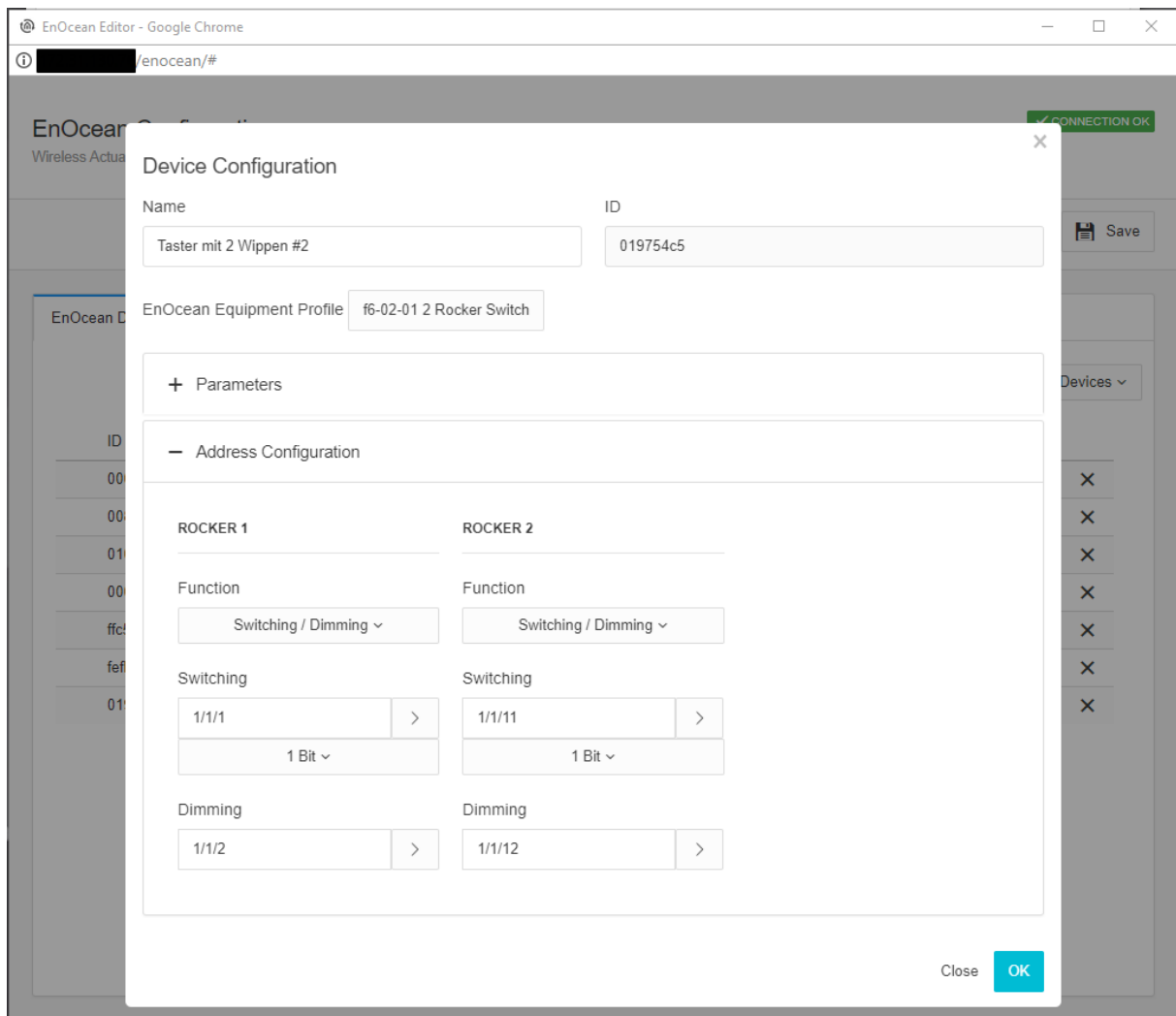


Figure 4: Example device configuration - EnOcean-Editor

4 APP INSTALLATION / UPDATE

Please proceed as follows to install an App.

1. Open the **APPMODULE** web page: Enter <IP Address of APP MODULE> into your browser's address bar and press Enter. The **APPMODULE** web interface will appear.
2. Log in with your user credentials. Please refer to the **APPMODULE** documentation for login details.

http://www.bab-tec.de/index.php/download_de.html

3. Click on the menu entry "App Manager"
4. You are now on the page where already installed Apps are listed. The list will be empty if no apps have been installed. Click "Install App" in order to install a new app.
5. Now click on "Select App"; a file selector window will appear.
6. Choose the app and click "OK".
7. After the message "Installation successful" appears, click "OK". You are ready to configure the App.
8. To update an already installed app, click on the App icon in the "App Manager".
9. The detail view of the App appears. Click on "Update App" to select the app package and start the update.
10. After the message "Installation successful" appears, click "OK". The app has been updated. Your instance configurations will remain unchanged.

5 APP SETTINGS

This app handles KNXnet/IP routing on the **APPMODULE** EnOcean. Please note that configuration changes need a few seconds to be applied.

5.1 INSTANCE

Instance name:

As soon as the app is installed, you can create a so called "Instance".

Comment

In order to create an instance, click on the symbol "Create Instance".

5.2 ROUTING CONFIGURATION

Enable Routing:

Enable or disable routing.

Routing Address (x.y.0):

Assign a physical address.

Example of a physical address:

- Area coupler valid address: 1.0.0; 2.0.0; 3.0.0; ... 15.0.0
- Line coupler valid address: 1.1.0; 1.2.0; 1.3.0; ... 15.15.0

Please ensure that it is a physical address which corresponds to a line coupler or area coupler.

5.3 TUNNELLING CONFIGURATION

Enable Tunnelling:

Enable or disable the tunnelling functionality.

After completing the configuration, please save the instance.