



REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

KEBA KNX Connect App Documentation

Version: 1.0.0

Type: Application

Article No.: BAB-XXX

Documentation version II

Actual state 08/22

Date: 23. August 2022

EN

REAL SMART HOME GmbH

Hörder Burgstraße
D-44263 Dortmund

Email: [info\[at\]realsmarthome.de](mailto:info[at]realsmarthome.de)

Tel.: +49 (0) 231-586974-00
Fax.: +49 (0) 231-586974-15
www.realsmarthome.de

TABLE OF CONTENTS

1 Introduction.....	4
IMPORTANT INFORMATION ON THE OPERATING INSTRUCTIONS.....	4
2 KEBA KNX Connect - Functional overview.....	5
2.1 Highlights.....	5
3 The innovative, modular App-concept for the building automation.....	6
3.1 Information about the appmodule.....	6
4 App installation / update.....	7
5 App settings.....	8
5.1 Instance.....	8
5.1.1 General connection settings.....	8
5.1.2 Polling interval configuration.....	9
5.1.3 Charging station information.....	9
5.1.4 Charging station status.....	10
5.1.5 Charging station control.....	11
6 Attachment.....	12

1

INTRODUCTION

Thank you for your trust, and the purchase of the **KEBA KNX Connect**-app for the BAB APPMODULE. With the **KEBA KNX Connect**-app you get simple use of KEBA KeContact P-30 Modbus® charging station registers in building automation. This documentation will help you get started with the app and aims to improve your setup experience.

REAL SMART HOME GmbH

IMPORTANT INFORMATION ON THE OPERATING INSTRUCTIONS

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 This entails the possibility that parts of this documentation might be out-of-date.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

This app is an independent product, with no legal ties to Modbus®. Neither BAB APP MARKET GmbH nor the developer of this app take any claim in the trademarks owned by Modbus®.

2 KEBA KNX CONNECT - FUNCTIONAL OVERVIEW

With this app you can connect KEBA KeContact P-30 charging station to the KNX world via TCP in no time at all. For example, you can transfer data from charging station to your KNX system. The app works as a Modbus TCP master and offers read and write access to P-30 Modbus registers.

2.1 HIGHLIGHTS

- Access to up to 17 Modbus registers
- Controlling of charging station: enable/disable and energy limit for charging
- 1 Bit, 1 Byte, 2 bytes and 4 bytes data
- Read and write registers
- Easy usage of P-30 charging station readings in KNX
- Full interoperability with other apps and features

3 THE INNOVATIVE, MODULAR APP-CONCEPT FOR THE 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 YOUR 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

Product variants:

The APPMODULE is available in three variants:

- APPMODULE KNX/TP - for stand-alone use on KNX/TP Bus
- APPMODULE EnOcean - for stand-alone use in the EnOcean wireless network
- APPMODULE Extension - for use in an IP-based KNX installation (KNXnet/IP) or as extension for an EIBPORT

4 APP INSTALLATION / UPDATE

Please proceed as follows to install an App.

- 1 Open the APPMODULE web page: Enter <IP Address of **APPMODULE** > into your browser's address bar and press Enter. The APPMODULE web interface will appear.
- 2 Log in to your **APPMODULE** with your login data. How to log in to the **APPMODULE** can be found in the **APPMODULE** documentation.
- 3 Click on the menu entry "App Manager"
- 4 You are now on the page where already installed Apps are listed. The list is 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. Choose the Smart Home App »KEBA KNX Connect« and click "OK".
The Smart Home App "KEBA KNX Connect" must first be downloaded from the **BAB APP MARKET** (www.bab-appmarket.de).
- 6 After the message "Installation successful" appears, click "OK". The app has been updated. Your instance configurations will remain unchanged.
- 7 To update an already installed app, click on the App icon in the "App Manager".
- 8 The detail view of the App appears. Click on "Update App" to select the app package and start the update.
The update version must be downloaded from the **BAB APP MARKET**.

Information

Please use Google Chrome as your browser to configure the app.

5 APP SETTINGS

With this app you can connect KEBA KeContact P-30 charging station to the KNX world in next to no time.

Information

The browser-session expires after a period of 60 minutes due to inactivity. Unsaved changes to the configuration is lost.

5.1 INSTANCE

Once the app is installed, you can create an "instance". In order to create an instance, click on the symbol "Create Instance".

Instance Name:

Choose a name for this new instance.

Comment:

Insert a description what this instance does.

Note on communication with the Modbus Gateway:

After an interruption of the network connection, e.g. by restarting the charging station, failure of the power supply, or similar, the KEBA KNX Connect App reconnects automatically under normal circumstances.

Nevertheless, this should be checked and, if necessary, the corresponding instance of the app should be restarted.

5.1.1 GENERAL CONNECTION SETTINGS

Charging Station IP Address:

The IP address of the charging station to connect to.

Port number:

The TCP port number of the charging station to connect to.

Modbus Unit ID:

The unit/slave ID of the Modbus device to which a connection is to be established.

5.1.2 POLLING INTERVAL CONFIGURATION

Polling Interval in seconds (global):

The polling interval defines in which interval the value is read via the Modbus TCP gateway.

Multiple Polling Interval activation:

Check this option to enable and configure multiple polling intervals (slow, medium, fast) for the application. Each tab can be associated with one of the options. If you don't select anything, the global polling interval is used.

Polling Interval in seconds (slow): defines in which interval the value is read via the Modbus TCP gateway with slow speed.

Polling Interval in seconds (medium): defines in which interval the value is read via the Modbus TCP gateway with medium speed.

Polling Interval in seconds (fast): defines in which interval the value is read via the Modbus TCP gateway with fast speed.

5.1.3 CHARGING STATION INFORMATION

Product Type:

Charging station type. e.g.: KC-P30.

Serial Number:

Serial number of the charging station. e.g: 18416854.

Firmware version:

Firmware version of the charging station. e.g: 3.10.14.

Supported current:

Max. supported current by the hardware of the charging station. e.g: 32A.

Device series:

Current series of the charging station. e.g: C-Series.

Energy Meter:

Energy meter type of the charging station. e.g: Standard, not calibrated.

Retrieve information button:

When creating a new instance, user can retrieve charging station information by pressing this button.

Information

Before retrieving charging station information by pressing the button, the following general connection settings must be completed: IP-address, port number and unit ID.

5.1.4 CHARGING STATION STATUS

This section contains the charging station elements which should be read data from. Define a group address for each element.

Total Energy in kWh (EIS 9):

Total energy consumption of the charging station. Define the group address used to read energy consumption from.

Charging State (EIS 14):

State of the charging station. 0: Start of the charging station 1: The charging station is not ready to charge. The charging station is not connected to an electric vehicle, it is blocked by the authorization function or some other mechanism 2: The charging station is ready to charge and is waiting a reaction from the electric vehicle 3: a charging process is active 4: an error has occurred 5: the charging process is temporarily interrupted because the temperature is too high or the wallbox is in suspend mode.

Cable State (EIS 14):

State of the charging cable."0: No cable is plugged in 1: Cable is connected to the charging station (not to the electric vehicle) 3: Cable is connected to the charging station and locked (not to the electric vehicle) 5: Cable is connected to the charging station and the electric vehicle (not locked) 7: Cable is connected to the charging station and the electric vehicle and locked(charging)".

Error code (EIS 15):

Error code of the charging station.0: No error
 1: Specific error code. The displayed value is hexadecimal. e.g. hex = 40000, this stands for error group 4.

Current Phase 1 in A (EIS 5):

Current value measured on phase 1 in A.

Current Phase 2 in A (EIS 5):

Current value measured on phase 2 in A.

Current Phase 3 in A (EIS 5):

Current value measured on phase 3 in A.

Real power in W (EIS 11):

The active power of the charging station.

Voltage Phase 1 in V (EIS 10):

Measured voltage value on phase 1 in V.

Voltage Phase 2 in V (EIS 10):

Measured voltage value on phase 2 in V.

Voltage Phase 3 in V(EIS 10):

Measured voltage value on phase 3 in V.

Specification of the maximum charging current in A (EIS 5):

The maximum charging current of the charging station.

Maximum supported charging current in A (EIS 5):

The maximum current value that can be supported by the charging station hardware.

Current power factor (cos phi) in 0.1% (EIS 5):

The current active power factor (cos phi) of the charging station.

Charged energy in kWh (EIS 9):

The transferred energy of the current charging session.

5.1.5 CHARGING STATION CONTROL

This section contains the charging station elements which should be write data to. Define a group address for each element.

Charging station enable/disable (EIS 1):

Set the charging station to enabled or disabled. An active charging process will be aborted. (EIS 1: 0 = Disabled, 1 = Enabled).

Energy limit for charging in kWh (EIS 5):

Set the energy transfer for the current or the next charging process. Once this value is reached, the charging process will stop.

6 ATTACHMENT

function	EIS type	DPT	typical function	typical values	data	identifier
PriorityPosition	EIS1	DPT 1*	Wind alarm	1=high and inhibit	1 Bit	1-bit
Switch	EIS1	DPT 1*	Light switching	0=Off; 1=On	1 Bit	1-bit
DimControl	EIS2	DPT 3*	Dimming	0=Off; 1=On xxxx=relative dimming 0-255=absolute dimming	1Bit 4Bit 8Bit	3-bit controlled
Time	EIS3	DPT 10*	Time	Hhh:mm:ss	3 Byte	Time
Date	EIS4	DPT 11*	Date	dd:mm:yyyy	3 Byte	Date
Value	EIS5	DPT 9*	Value	[-671088.64 ... 670760.96]	1Byte	2-byte float value
DimValue	EIS6	DPT 5*	Percent	0-100%	1Byte	8-bit unsigned value
DriveBlade Value	EIS6	DPT 5*	Position value	0-100%; 0-255	1Byte	8-bit unsigned value
DriveShutter Value	EIS6	DPT 5*	Position value	0-100%; 0-255	1Byte	8-bit unsigned value
Position	EIS6	DPT 5*	Control value Heating	0-100%; 0-255	1Byte	8-bit unsigned value
DriveMove	EIS7	DPT 1*	Move shutter	0=up 1=down	1Bit	1-bit
DriveStep	EIS7	DPT 1*	Adjusting the slat blind	0=up; 1= down; 0 or 1 during movement=stop	1Bit	1-bit
PriorityControl	EIS8	DPT 2*	Priority	0,1 switch; 3=forced off; 4=forced on	2Bit	1-bit controlled
FloatValue	EIS9	DPT 14*	IEEE	Floating-point value	4 Byte	4-byte float value
Counter 16bit	EIS10	DPT 7*	Counter 16 bit	0 - 65.535	2Byte	2-byte unsigned value
Counter 16bit	EIS10	DPT 8*	Counter 16 bit with sign	-32.768 - 32.767	2Byte	2-byte signed value
Counter 32bit	EIS11	DPT 12*	Counter 32 bit	0 - 4.294.967.295	4Byte	4-byte unsigned value
Counter 32bit	EIS11	DPT 13*	Counter 32 bit with sign	0 - 4.294.967.295	4Byte	4-byte signed value
Access Control	EIS12	DPT 15*	Access control	Card number	4Byte	Entrance access
Char	EIS13	DPT 4*	ASCII characters	Character	1Byte	Character
Counter 8bit	EIS14	DPT 5*	Value	0 - 255	1Byte	8-bit unsigned value
Counter 8bit	EIS14	DPT 6*	Value with sign	-128 - 127	1Byte	8-bit signed value
String	EIS15	DPT 16*	String	max. 14 characters	14 Byte	Character string

EIB/KNX devices exchange fixed prescribed data formats with each other. These are defined in types. The old designations of the types are EIS (EIB Interworking Standard)
The new designations are DPT (Data Point Type)