REAL SMART HOME

REAL SMART HOME GmbH

APPMODULE

BAB KNX Connect for AMTRON Professional

Smart Home App Documentation

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1 INTRODUCTION

Thank you for your trust, and the purchase of the **BAB KNX Connect for AMTRON Professional** -Smart Home App for the BAB **APP**MODULE. With »**BAB KNX Connect for AMTRON Professional**« you can integrate the intelligent AMTRON Professional series, AMTRON Charge Control, and AMEDIO Professional into the smart home in no time.

This documentation will help you get started with the Smart Home 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 This entails the possibility that parts of this documentation might be out-of-date.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

This app is an independent product and has no legal connection with MENNEKES Elektrotechnik GmbH & Co. KG.
Neither **BAB** APP MARKET GmbH nor the developer owns the above trademark.
This smart home app may be used in conjunction with services provided by a third-party manufacturer or external provider. The respective manufacturer is responsible for data protection.

2 BAB KNX CONNECT FOR AMTRON PROFESSIONAL FUNCTIONAL OVERVIEW

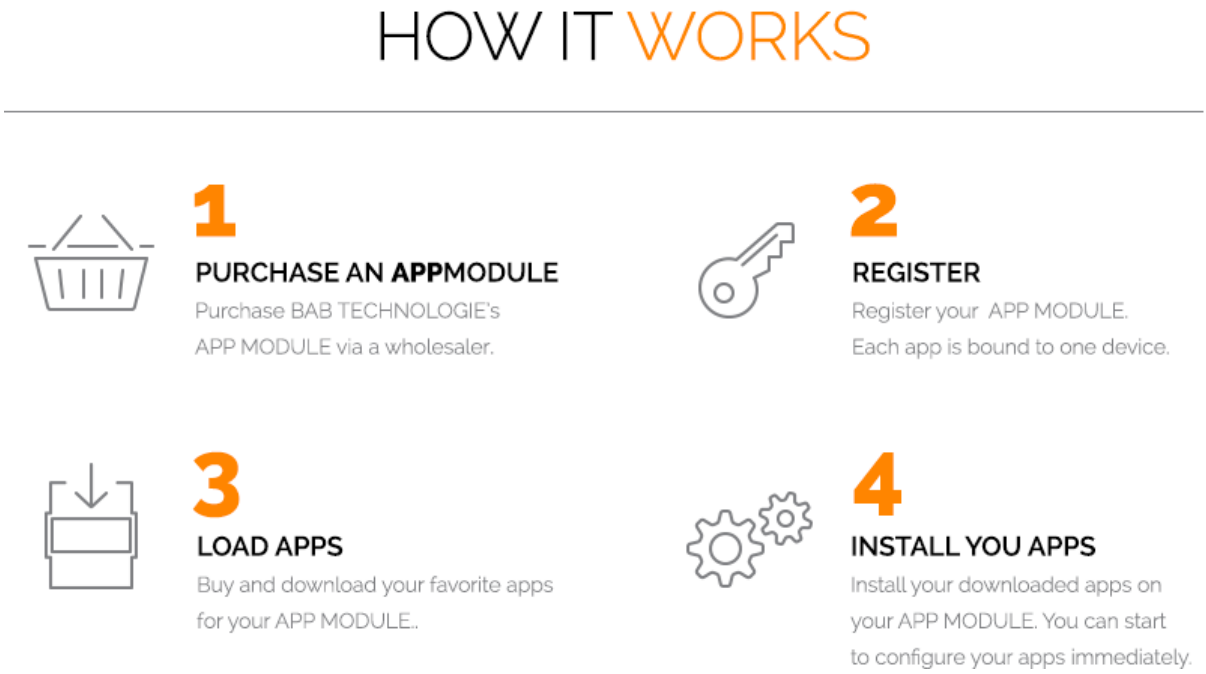
Charging stations from Mennekes stand for easy and safe charging of electric vehicles. With »**BAB KNX Connect for AMTRON Professional**« you can integrate the intelligent AMTRON Professional series, AMTRON Charge Control, and AMEDIO Professional into the smart home in no time.
The app provides a lot of useful information for use in smart scenarios. With this information, you can, for example, plan charging processes depending on your PV system, battery storage or a heat pump, or create time- and person-dependent charging authorisations.

2.1 HIGHLIGHTS

- Compatible with all AMTRON Professional series, AMTRON Charge Control, and AMEDIO Professional charging stations
- Easy transfer of charging information to the Smart Home
- Current Charging preset via KNX
- Detailed status information
- Adjustable polling interval
- Support of up to 5 stations (Pro version)

3 THE INNOVATIVE, MODULAR SMART HOME APP CONCEPT FOR THE BUILDING AUTOMATION

The innovative, modular Smart Home App concept for building automation. The **APP**MODULE brings the innovative, modular Smart Home App concept into building automation. You can mix and match any of the diverse applications that are available to ingrate third-party solutions. With these Smart Home Apps from the dedicated **BAB** APPMARKET, the **APP**MODULE becomes a tailor-made integration unit for your building automation.



Manufacturer of the **APP**MODULE BAB TECHNOLOGIE GmbH

Distribution of all Smart Home Apps for the **APP**MODULE BAB APPMARKET GmbH

Smart Home App developer REAL SMART HOME GmbH

3.1 INFORMATION ABOUT THE APPMODULE

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

https://bab-tec.de/appmodule#downloads

Product variants:
The **APP**MODULE is available in three variants:

- **APP**MODULE KNX/TP – for stand-alone use on KNX/TP Bus
- **APP**MODULE EnOcean – for stand-alone use in the EnOcean wireless network
- **APP**MODULE IP – for use in an IP-based KNX installation (KNXnet/IP) or as extension for an EIB**PORT**

4 SMART HOME APP INSTALLATION / UPDATE

Please proceed as follows to install a Smart Home App.

1. Open the **APP**MODULE web page: Enter <IP Address of **APP**MODULE > into your browser's address bar and press Enter. The **APP**MODULE web interface will appear.

2. Log in with your user credentials. Please refer to the **APP**MODULE documentation for login details.

3. Click on the menu entry "App Manager"

4. You are now on the page where already installed Smart Home Apps are listed. The list will be empty if no Smart Home Apps have been installed. Click "Install App" in order to install a new Smart Home App.

5. Now click on "Select App"; a file selector window will appear. Choose the Smart Home App » **BAB KNX Connect for AMTRON Professional** « and click "OK".

The Smart Home App » **BAB KNX Connect for AMTRON Professional** « must first be downloaded from the **BAB** APPMARKET
(www.bab-appmarket.de).

After the message "Installation successful" appears, click "OK". You are ready to configure the Smart Home App.

To update a Smart Home App manually you have to proceed as follows

1. To update an already installed Smart Home App, click on the App icon in the "App Manager".

2. The detail view of the Smart Home App appears. Click on "Update App" to select the Smart Home App package and start the update. The update version must be downloaded from the **BAB** APPMARKET.

After the message "Installation successful" appears, click "OK". The Smart Home App has been updated. Your instance configurations will remain unchanged.

The Smart Home App can also be updated directly in the web interface. Without having to download the Smart Home App from the **BAB**APPMARKET first.
In the “App Manager” available Smart Home App updates are reported

Information
To configurate the Smart Home App please use Google Chrome.

5 SMART HOME APP SETTINGS

Charging stations from Mennekes stand for easy and safe charging of electric vehicles. With »**BAB KNX Connect for AMTRON Professional**« you can integrate the intelligent AMTRON Professional series, AMTRON Charge Control, and AMEDIO Professional into the smart home in no time.
The app provides a lot of useful information for use in smart scenarios. With this information, you can, for example, plan charging processes depending on your PV system, battery storage or a heat pump, or create time- and person-dependent charging authorisations.

5.1 BAB KNX CONNECT FOR AMTRON PROFESSIONAL

Note:

After 60 minutes of inactivity, the browser session is automatically terminated. Any unsaved changes will be lost.

As soon as the Smart Home App is installed, you can create so called “Instance”. An Instance is one of several objects of the same class. 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.

5.2 CONNECTION PARAMETERS

Query interval in seconds (1–120)

The polling interval defines the time interval at which the status values are read from the Modbus TCP server. The polling interval is automatically set to 15 seconds when a new instance is created. The received values are only output in the event of a value change on KNX.

Modbus TCP Server

Enter IP address on which the Modbus TCP Server waits for incoming connections.

Modbus TCP Server Port (1–65535)

Enter port number on which the Modbus TCP Server waits for incoming connections.

Modbus TCP-Unit ID (1–255)

Unit/Slave ID of the Modbus device to which a connection is to be established.

5.3 INFORMAITON ON GOING OPERATIONS

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

Charging station status (EIS 14 0–255)

Entering the group address for the status message of the charging station:

- 0 = Available
- 1 = Busy
- 2 = Reserved
- 3 = Not available
- 4 = Error
- 5 = In preparation
- 6 = Loading active
- 7 = Charging paused – Charing current below 6A
- 8 = Charging paused
- 9 = Charging finished

Current charge current (total) (EIS 9 4 Byte FP)

Current demand during the currently running charging process in amperes.

Current charged energy (EIS 9 4 Byte FP)

Total charged energy for the current charging process in watt hours. This value remains until the next charging process.

Total current output (EIS 9 4 Byte FP)

Power in watt hours that has been drawn since the charging station was commissioned.

Status: Current charging current limit (EIS 9 4 Byte FP)

Status of the current charging current for a charging station in A.

Status: Operator distribution limit L1 (EIS 9 4 Byte FP)

Maximum available current in A for the network (master/slave) for L1. Only applicable at the master station!

Status: Operator distribution limit L2 (EIS 9 4 Byte FP)

Maximum available current in A for the network (master/slave) for L2. Only applicable at the master station!

Status: Operator distribution limit L2 (EIS 9 4 Byte FP)

Maximum available current in A for the network (master/slave) for L3. Only applicable at the master station!

Send all status (EIS 1)

An incoming 1 triggers a poll at the Modbus TCP Server, and the sending of all values, regardless whether the value actually changed and by how much.

5.4 CONTROL

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

Preset: Current charging current (EIS 9 4 Byte FP)

Setting the limit for the charging current for the current charging process at a charging station. A limit below 6 amps automatically pauses the charging process. The setting is made in amperes.

Preset: Operator distribution limit L1 (EIS 9 4 Byte FP)

Specification of the maximum available current at phase L1 for load management in a charging station network. The setting is made at the respective master of the network. The values are entered in amperes.

Preset: Operator distribution limit L2 (EIS 9 4 Byte FP)

Specification of the maximum available current at phase L2 for load management in a charging station network. The setting is made at the respective master of the network. The values are entered in amperes.

Preset: Operator distribution limit L3 (EIS 9 4 Byte FP)

Specification of the maximum available current at phase L3 for load management in a charging station network. The setting is made at the respective master of the network. The values are entered in amperes.

6 ATTACHMENT

6.1 DATAPOINT TYPES

Function	EIS type	Data point type	Typical value	Data	Identifier
Switching	EIS 1	DPT 1.yyy	[0] = Off | FALSE; [1] = On | TRUE	1 Bit	1-bit
Relative Dimming	EIS 2	DPT 3.yyy	**„Dimming steps“**: [[0],[2…7]] Darker [2, 4, 8, 16, 32, 64] -Steps and [[1],[2…7]] Brighter [2, 4, 8, 16, 32, 64]-Steps **„Start/Stop Diming“**: [0,8] Stop; [1] Darker und [9] Brighter	4 Bit	4-bit
Time	EIS 3	DPT 10.yyy	hh:mm:ss	3 Byte	Time
Date	EIS 4	DPT 11.yyy	dd:mm:yyyy	3 Byte	Date
Floating point number (short)	EIS 5	DPT 9.yyy	-671 088,64 … 670 433,28	2 Byte	2-byte float value
Percent, Position, Brightness, …	EIS 6	DPT 5.yyy	0 … 100%	1 Byte	8-bit unsigned value
Blinds Drive/adjust	EIS 7	DPT 1.yyy	[0] = up; [1] = down When driving [0,1] = stop	1 Bit	1-bit
Priority	EIS 8	DPT 2.yyy	[0], [1] Switch on, off; [3] = Forced off; [4] = Forced on	2 Bit	1-bit controlled
IEEE Floating point number (long)	EIS 9	DPT 14.yyy	4-Octet float value; IEEE 754	32 Bit	4-byte float value
Counter 16 Bit Unsigned	EIS 10u	DPT 7.yyy	0 … 65.535	16 Bit	2-byte unsigned value
Counter 16 Bit Signed	EIS 10	DPT 8.yyy	-32.768 … 32.767	16 Bit	2-byte signed value
Counter 32 Bit Unsigned	EIS 11u	DPT 12.yyy	0 … 4.294.967.295	32 Bit	4-byte unsigned value
Counter 32 Bit Signed	EIS 11	DPT 13.yyy	-2.147.483.648 … 2.147.483.647	32 Bit	4-byte signed value
Access control	EIS 12	DPT 15.yyy	Access data	4 Byte	Entrance access
ASCII Character	EIS 13	DPT 4.yyy	Char	1 Byte	Character
Counter 8 Bit Unsigned	EIS 14u	DPT 5.yyy	0 … 255	8 Bit	8-bit unsigned value
Counter 8 Bit Signed	EIS 14	DPT 6.yyy	-128 … 127	8 Bit	8-bit signed value
String	EIS 15	DPT 16.yyy	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)