Aeotec

Aeotec Zi-Stick (Zigbee)

SKU: AEOZZGA008

Quickstart

This is a **Z-Wave Device** for . To run this device please connect it to your mains power supply.

Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law. The manufacturer, importer, distributor and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material. Use this equipment only for its intended purpose. Follow the disposal instructions. Do not dispose of electronic equipment or batteries in a fire or near open heat sources.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.

Z-Wave ensures a reliable communication by reconfirming every message (**two-way communication**) and every mains powered node can act as a repeater for other nodes (**meshed network**) in case the receiver is not in direct wireless range of the transmitter.

This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.

Product Description

Run your smart home locally, privately and cloud-free. Aeotec Zi-Stick (Zigbee) lets you build your own Smart Home automation gateway using Zigbee 3.0 technology.

The Zi-Stick is independent from platforms. Host platforms like Raspberry Pi, Orange Pi, BeagleBone, PC's or Laptops can be transformed into universal Zigbee gateways connecting Zi-Stick to the USB interface.

Zi-Stick is used in combination with Home Automation software. Software solutions like Home Assistant, openHab or Zigbee2MQTT are just some common solutions, which work with the Zi-Stick.

Control and smart up your sensors, lights or switches. A huge variety of Zigbee products from different vendors can be connected to the Zi-Stick.

Automate and manage your Zigbee Smart Home. With the home automation software you can create scenes and rules, which will increase your comfort and safety at home. In combination with certain Zigbee devices, you can precisely analyze and optimize your energy consumption in the software's user interface. Besides that your heating system can be smartened up and increase your comfort and energy efficiency.

Features:

- Zigbee technology
- 2.4GHz globally recognised frequency
- Zigbee compatible microcontroller EFR32MG21 inside
- Rx sensitivity: -99dBm
- Max Tx power: 20dBm
- Open area range: 200m

- USB interface with standard NCP commands from Silicon Labs. Easy to use as Serial Port on the Host machine (PC/laptop/single board computers)

- Multiple plugins for openHAB, Home Assistant, Node-RED and other DIY platforms C, Node.js and Python libraries to build your own application

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state**. Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Safety Warning for Mains Powered Devices

ATTENTION: only authorized technicians under consideration of the country-specific installation guidelines/norms may do works with mains power. Prior to the assembly of the product, the voltage network has to be switched off and ensured against re-switching.

Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.
3. Remove all dead devices from associations. Otherwise you will see severe delays.
4. Never use sleeping battery devices without a central controller.
5. Dont poll FLIRS devices.
6. Make sure to have enough mains powered device to benefit from the meshing

Technical Data

Dimensions	0.0180000x0.0090000x0.0370000 mm
EAN	1220000017191
Frequency	XXfrequency
Maximum transmission power	XXantenna

Explanation of Z-Wave specific terms

- **Controller** — is a Z-Wave device with capabilities to manage the network. Controllers are typically Gateways,Remote Controls or battery operated wall controllers.

- **Slave** — is a Z-Wave device without capabilities to manage the network. Slaves can be sensors, actuators and even remote controls.

- **Primary Controller** — is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.

- **Inclusion** — is the process of adding new Z-Wave devices into a network.

- **Exclusion** — is the process of removing Z-Wave devices from the network.

- **Association** — is a control relationship between a controlling device and a controlled device.

- **Wakeup Notification** — is a special wireless message issued by a Z-Wave device to announces that is able to communicate.

- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.