Secure Controls Secure Smart Plug 302 SSP 302 UE Manual

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Secure Controls

Secure Smart Plug 302

SKU: SSP 302 UE

Quickstart

This is a

On/Off Power Switch
for
CEPT (Europe).

To run this device please connect it to your mains power supply.

To add this device to your network execute the following action:
To include the SSP 302 onto a network, put the controller into inclusion mode. Now, press and hold the button on SSP 302 for 4 to 7 seconds then release. The network status LED will start flashing (twice per second) on successful start of inclusion process. On successful inclusion the LED will turn off.

Please refer to the
Manufacturers Manual for more information.

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

SSP 302 EU variant is a mains-powered, plug-in device that supports energy monitoring. It is suitable for switching loads up to 3.6KW at 230V AC. It can measure voltage, current, power, energy etc. The SSP 302 acts as a repeater in a Z-Wave network by helping messages from other devices reach there destinations, without losing a plug socket.

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.

Reset to factory default

This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

Please use this procedure only when the primary controller is missing or otherwise inoperable. Power cycle the device and press and hold the button for more than 11 seconds and less than 15 seconds within the 60 seconds of power cycle to put the device in factory default, that include setting all the configuration, Association to factory default and removing the device from Z-Wave 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.

Inclusion

To include the SSP 302 onto a network, put the controller into inclusion mode. Now, press and hold the button on SSP 302 for 4 to 7 seconds then release. The network status LED will start flashing (twice per second) on successful start of inclusion process. On successful inclusion the LED will turn off.

Exclusion

To exclude the SSP 302 from a network, put the controller into exclusion mode. Now, press and hold the button on SSP 302 for 4 to 7 seconds then release. The network status LED will start flashing (twice per second) on successful start of exclusion process.After successful exclusion the network status LED will start flashing once per second, and the device will reset to factory default.

Communication to a Sleeping device (Wakeup)

This device is battery operated and turned into deep sleep state most of the time to save battery life time. Communication with the device is limited. In order to communicate with the device, a static controller **C** is needed in the network. This controller will maintain a mailbox for the battery operated devices and store commands that can not be received during deep sleep state. Without such a controller, communication may become impossible and/or the battery life time is significantly decreased.

This device will wakeup regularly and announce the wakeup state by sending out a so called Wakeup Notification. The controller can then empty the mailbox. Therefore, the device needs to be configured with the desired wakeup interval and the node ID of the controller. If the device was included by a static controller this controller will usually perform all necessary configurations. The wakeup interval is a tradeoff between maximal battery life time and the desired responses of the device. To wakeup the device please perform the following action:

NA

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

Association – one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, …). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a ‘Basic Set’ Command.

Association Groups:

Group NumberMaximum NodesDescription

1	4	Z-Wave Plus Lifeline.In this group Energy (Active Energy, Apparent Energy) , Switch Status data will be r eported base on the delta or time interval configuration.
2	4	Power, In this group ActivePower data will be reported base on the delta or time interval configuration.
3	4	Electrical Parameter,In this group Voltage, Current and Power Factor data will be reported base on the d elta or time interval configuration.
4	4	Relay Status,In this group Switch Status data will be reported base on the delta or time interval configura tion.
5	1	Time,In this device will sync the time and date from the time master in the network.

Configuration Parameters

Z-Wave products are supposed to work out of the box after inclusion, however certain configuration can adapt the function better to user needs or unlock further enhanced features.

IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 … 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200â€ˆit may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the same logic applies: Values greater than 32768 may needed to be given as negative values too.

Parameter 1: Switch Status delta based configuration

This configuration Parameter will be used to enable/disable the delta base switch status reporting.
Size: 1 Byte, Default Value: 1

SettingDescription

Parameter 10: Current time interval based

This configuration Parameter will be used to set the time interval base reporting of currentin 1 second resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 11: Power Factor time interval based

This configuration Parameter will be used to set the time interval base reporting of Power Factor in 1 second

resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 12: Active Power time interval based

This configuration Parameter will be used to set the time interval base reporting of Active Power in 1 second resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 13: Active Energy time interval based

This configuration Parameter will be used to set the time interval base reporting of Active Energy in 1 second resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 14: Apparent Energy time interval based

This configuration Parameter will be used to set the time interval base reporting of Apparent Energy in 1 second resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 15: Relay and LED configuration

This configuration is used to change the relay LED status when relay is open/close and also enable to whether to retain the last relay status over power cycle.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Relay status will not be retain over power cycle, and Relay status LED will lit when relay ON and relay status LED will off when relay OFF.
1	Relay status will be retain over power cycle, and Relay status LED will lit when relay ON and relay status LE D will off when relay OFF.
2	Relay status will not be retain over power cycle, and Relay status LED will off when relay ON and relay statu s LED will lit when relay OFF.
3	Relay status will be retain over power cycle, and Relay status LED will off when relay ON and relay status L ED will lit when relay OFF.

Parameter 16: Sleep Current Configuration

This configuration is used to disconnect the load if the device current is less the configured sleep current for more than 30 seconds, this configuration has the resolution of0.001 A .
Size: 1 Byte, Default Value: 0

SettingDescription

Parameter 2: Voltage delta based configuration

This configuration Parameter will be used to enable/disable the delta base voltage reporting. Resolution of this parameter is 100 mV.if user wants to set 10V delta then it should be 10/0.1 = 100.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 3: Current delta based configuration

This configuration Parameter will be used to enable/disable the delta base curenrt reporting. Resolution of this parameter is 10 mA.if user wants to set 1A delta then it should be 1/0.01 = 100.
Size: 1 Byte, Default Value: 0

SettingDescription

Parameter 4: Power Factor delta based configuration

This configuration Parameter will be used to enable/disable the delta base Power Factor reporting in 0.1% resolution. if user wants to set Power Factor 10% = 10/0.1 = 100
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 5: Active Power delta based configuration

This configuration Parameter will be used to enable/disable the delta base Active Power reporting in 1 W resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 6: Active Energy delta based configuration

This configuration Parameter will be used to enable/disable the delta base Active Energyreporting in 1 Wh resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 7: Apparent Energy delta based configuration

This configuration Parameter will be used to enable/disable the delta base Apparent Energy reporting in 1 VAh resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 8: Switch Status time interval based

This configuration Parameter will be used to set the time interval base reporting of switch status in 1 second resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Parameter 9: Voltage time interval based

This configuration Parameter will be used to set the time interval base reporting of voltagein 1 second resolution.
Size: 2 Byte, Default Value: 0

SettingDescription

Technical Data

Hardware Platform	ZM5202
Device Type	On/Off Power Switch
Network Operation	Always On Slave
Firmware Version	01
Z-Wave Version	6.51.02
Certification ID	ZC10-15020014
Z-Wave Product Id	0x0059.0x0011.0x0001
Frequency	XXfrequency
Maximum transmission power	XXantenna

Controlled Command Classes

- Time

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.