

SPES-02 Smart Plug

EASYSAYER Co., LTD

Slave Device : Inclusion / Exclusion

Add to the Network

1. Put your Z-Wave controller into inclusion mode.
2. Plug the SmatPlug into the power outlet.
3. Press and hold on/off button about 5 seconds.
4. Orange LED will be flashing about 2 seconds, then inclusion process will be start.
5. Wait until inclusion will be done.

Remove From the Network

1. Put your Z-Wave controller into exclusion mode
2. Plug the SmatPlug into the power outlet.
3. Press and hold on/off button about 5 seconds.
4. Orange LED will be flashing about 2 seconds, then exclusion process will be start.
5. Wait until exclusion will be done.

Factory Reset

Please use this procedure only when the network primary controller is missing or otherwise inoperable.

1. Plug the SmatPlug into the power outlet.
2. Press and hold on/off button about 10 seconds.
3. Orange LED will be flashing about 2 seconds, then factory reset process will be start.

Devices from multiple manufactures in one network

SPES-02 is a wireless smartplug, based on Z-Wave Plus technology.

Z-Wave Plus enabled devices displaying the Z-Wave Plus logo can also be used with it regardless of the manufacturer, and can also be used in other manufacturer's Z-Wave enabled networks.

Remote On/Off control of the connected load is possible with other manufacturer's wireless Controller.

Each switch is designed to act as a repeater.

Repeaters will re-transmit the RF signal to ensure that the signal is received by its intended destination by routing the signal around obstacles and radio dead spots.

Association Command Class

Association Command

1. SPES-02 is an always listening Z-Wave device, so associations may be added or removed by a controller at any time.
Or If your controller requires to have the SPES-02 send a 'node information frame' or NIF for associations, then press and hold the On/Off button about 5 seconds will cause the SPES-02 to send its NIF.
2. There is only one group for the SPES-02
3. Association Group support is only 1. For Group 1, SPES-02 will report its latest status to Z-Wave Controller.
4. Maximum 5 devices that can be added to the group

Unsolicited Report	NOTIFICATION_REPORT	Notification Type : 0x08 Relay ON : 0x03 Relay OFF : 0x02	When unplugging from the wall outlet and plugged into a smart plug. The device is based on the current state relays Report to Notification. Or The Report also states that the relay current value of the device changed.
		Notification Type : 0x08 OverCurrent : 0x06	When over-current occurs, the device shuts off the relay. The device Report the over-current.
		Notification Type : 0x09 Hardware Fail : 0x01	Device must report when it is not the normal operation as an internal malfunction.
	MeterV3_REPORT	Rate Type: METER_REPORT_RATE_TYPE_IMPORT_V4(0x01) Meter Type : METER_REPORT_METER_TYPE_ELECTRIC_METER_V3(0x01) Delta Time : Transmission Period(min unit), Previous Meter Value : Previous Value	
		Scale:0x00	Report the KWh(4byte) value. - In addition to reporting regularly even when plugged in to a power source and the first report at a time.

	CONFIGURATION_REPO RT	Parameter Number : 5 Size : 1	<p>When connected equipment is changed to Use in the Not Use, when the device is changed to Not Use In Use.</p> <p>The standby power of connected devices to become this feature is enabled must be set. Or used the Default value.</p>
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Configuration Command Class

Parameter Number : 1 Size : 4 Default : 0 Possible Values : 0, 0x0003E801	First 3 Bytes : Standby Power Setting Value Last 1 Byte : Standby Power Enable/Disable If the value is set by 1000, standby power equals 10.00w (0x0003E8) and standby power enable is 1. → total 0x0003E801
Parameter Number : 2 Size : 1 Default : 1 Possible Values : 0, 1	Value : 1 → Periodic Measurement Value Transmission Enable Value : 0 → Periodic Measurement Value Transmission disable
Parameter Number : 3 Size : 1 Default : 1 Possible Values : 0, 1	Value : 0 → Power Accumulation Stop Value : 1 → Power Accumulation Start
Parameter Number : 4 Size : 1 Default : 0 Possible Values : 0, 1	Value : 0 → Connected Device Not Use Value : 1 → Connected Device Use – Before setting the standby power it does not report.
Parameter Number : 5 Size : 1 Default : 6 Possible Values : 0 ~ 144	Periodic Measurement Value Transmission Interval Minimum time interval : 10minutes Value : 1 (10minutes * 1) = 10minutes interval Value : 2 (10minutes * 2) = 20minutes interval Value : 144(10min * 144) = 24 hours interval =>MAX

Basic Command

COMMAND_CLASS_BASIC	BASIC_GET	BASIC_REPORT	Report Relay Status 0x00 : Relay OFF 0xFF : Relay ON
	BASIC_SET	0xFF	0xFF : Relay ON
		0x00	0x00 : Relay OFF

When controller send BASIC_SET with 0x00 data, SPES-02 will turn off the relay in order to cut down the AC power.

And SPES-02 will send ACK notification with POWER_MANAGEMENT type (0x08) and AC_MAINS_DISCONNECTED (0x02).

When controller send BASIC_SET with 0xFF data, SPES-02 will turn on the relay in order to connect the AC power.

And SPES-02 will send ACK notification with POWER_MANAGEMENT type (0x08) and AC_MAINS_RECONNECTED (0x03).

These ACK notifications will be sent as well when user press Power button.

Meter Command

COMMAND_CLASS_METER_V3	When the device requests a METER_GET reports the value set in the Scale.	METER_REPORT	
		Rate Type: METER_REPORT_RATE_TYPE_IMPORT_V4(0x01)	
		Meter Type : METER_REPORT_METER_TYPE_ELECTRIC_METER_V3(0x01)	
		Delta Time : Transmission Period(in minutes), Previous Meter Value : Previous Value	
	Scale:0x00	Report the KWh(4 byte) value	
Scale:0x02	Report the Watt(4byte) value The hex data of device must be divided by 100 because this data is 1/100 Watt unit.		
METER_RESET		initialize the KWh value	
METER_SUPPORTED_GET			
METER_SUPPORTED_REPORT	Scale: 0 or 2	Meter Type:0x01, Scale Supported:0x05	

Security Command Class is implemented

SPES-02 is security enabled Z-Wave plus product.

Security Enabled Z-Wave Controller must be used in order to fully utilize this product.

LED indication

Relay On : GREEN LED On

Relay Off : RED LED On

Overcurrent Detected : Orange LED blinking about 60 seconds

Firmware Upgrading : Orange LED blinking until Firmware Upgrading is finished.

Inclusion / Exclusion : Orange LED blinking fastly about 3 seconds.

Factory Reset : Orange LED blinking fastly about 3 seconds.

