Smart Plug User Manual
HKZW-SO07P

I.Product overview

Smart plug is a Z-Wave Switch plug which specifically used to enable Z-Wave command and control (on/off) of any plug-in tool. It can report real-time power and usage of power consumption.

Smart Plug is also a security Z-Wave device and supports the Over The Air (OTA) feature for the product's firmware upgrade. Of course, it also has the latest SmartStart function, which automatically enters the network after power on, which is convenient for the user to operate.
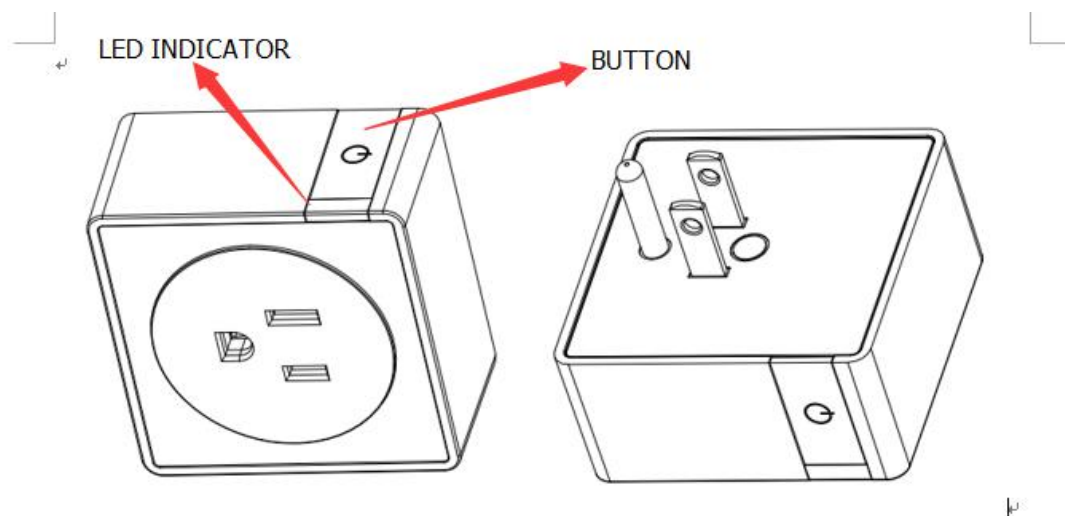
II.Package Contents

- 1x Smart Plug
- 1x User Manual

III.Product features:

1) AC output switch on/off by manual or Z-Wave command;
2) Supporting power meter;
3) Supporting repeater role;
4) Supporting firmware OTA;
5) Supporting SmartStart;

6) Support S2 security network
7) Supports over-current protection(Applicable only to HKZW-SO07P)

IV.Product structure

V.Specification

Power supply:	AC 90-135V,60Hz
Power loss:	≤1W
Nominal input voltage:	120V
Rated current:	15A max
Storage temperature:	-20-60℃
Operational temperature:	-10-40℃
Radio frequency:	908.42MHz
Radio protocol:	Z-Wave
Range:	More than 100m outdoors, About 30m Indoors(depending on building materials)
Dimensions:	60*60*31mm

VI. INSTALLATION

1) Insert your device into a socket.

2) Add device into your Z-Wave network if necessary.

3) Connect load to the plug, make sure the load does not exceed 1800W.

4) Set the connected device to ON, to turn on connected device manually, turn on the Smart Plug by clicking button.

5) Click Z button to turn off the Plug manually, once the Smart Plug is turned off, the LED indicator will turn off.

VII.Z-WAVE NETWORK INCLUSION

Smart Plug can be included and operated in any Z-WAVE network with other Z-WAVE certified devices from other manufacturers and /or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

Manual Z-Wave network inclusion:
1) Connect the power supply.
2) Setting up the Z-WAVE gateway to allow adding devices.
3) Triple click the Z-button, the LED indicator will be flashing 3 times in Blue.
4) Smart Plug should be recognized and included into the Z-Wave network.

SmartStart Z-Wave network inclusion:
1) Use the Gateway APP to scan the QR code.
2) Select device type and add Smart Plug to network.
3) Power up the device, the LED indicator will be flashing 3 times in Blue and then turn off.
4) After the device accesses the network successfully, the APP interface displays the corresponding device information.

NOTE:

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If you want your Smart Plug to be a security device that use secure/encrypted message to communicate in a Z-Wave network, then a security enabled Z-Wave controller is needed.

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Z-WAVE NETWORK EXCLUSION

1) Insert the Plug into a socket.
2) Set the Z-Wave network controller into the exclusion mode.
3) Triple click the Z button.

4) The LED indicator will blink blue till the removing process is completed, then the LED indicator will start to flash slowly.

Ⅷ. RESETTING SMART PLUG

Reset procedure clears the Smart Plug's memory, including Z-Wave
network controller information and energy consumption data. To reset Smart Plug:

1) Insert the Plug into a socket.
2) Press and hold the Z button for more than 20 seconds.
3) If holding time more than 20seconds, the LED indicator will keep on for 3 seconds, which means resetting is complete.
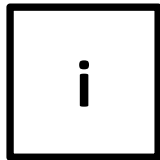
i	**NOTE** Once the reset procedure is completed, Plug's relay will turn off. The reset feature works only when the plug has been included into a Z-Wave network. Use this procedure only in the event that the network primary controller is missing or otherwise inoperable.

IX. ASSOCIATION

Association command class allows Smart Plug to communicate with other Z-Wave devices directly, such as sending BASIC REPORT whenever the smart plug is turn on or off.

!	**TIP:** 1. The max number of associated nodes of each groups is 5. 2. Association allows for direct transmission of control command between devices and takes place without the participation of the main controller.

X. ADVANCED CONFIGURATION

Smart Plug offers a wide variety of advanced configuration settings. Below parameters can be accessed from main controllers configuration interface.

Parameter No. 20 Overload protection
Smart Plug keep detecting the load power, once the AC current exceeds 16.5A for more than 5s, smart plug's relay will turn off.

0 - The function is disabled

1 - The function is enabled.

Default setting: **1**

Parameter size: **1 [byte]**

Parameter No. 21 Setting device status after power failure

Define how the Plug reacts after the power supply is back on.

0 - Smart Plug memorizes its state after a power failure.

1 - Smart Plug does not memorize its state after a power failure.

Connected device will be on after the power supply is reconnected.

2 - Smart Plug does not memorize its state after a power failure.

Connected device will be off after the power supply is reconnected.

Default setting: **0**

Parameter size: **1 [byte]**

Parameter No. 24 Notification when Load status change

Smart Plug can send notifications to association device (Group Lifeline) when state of smart plug's load change.

0 - The function is disabled.

1 - Send Basic report.

2 - Send Basic report only when Load condition is not changed by Z-WAVE Command.

Default setting: **1**

Parameter size: **1 [byte]**

Parameter No. 27 Indicator modes

After smart plug being included into a Z-Wave network, the RGB LED indicator will indicator the situation of load.

0 - The Smart Plug will work in Power indication mode (Point Ⅶ). .

1 - The Smart Plug will work in Power indication mode (Point Ⅶ) for 5 seconds, when the state of Smart Plug's load changed. RGB LED indicator will turn off if there is no more switch action in 5 seconds.

2 –Night lamp mode.

Default setting: **0**

Parameter size: **1 [byte]**

POWER AND ENERGY REPORTS SETTINGS:

Parameter No. 151 Threshold of power report

Power threshold to be interpreted, when the change value of load power exceeds the setting threshold, the smart plug will send meter report to association device (Group Lifeline).

Available settings: **0 - 65535** (0 - 65535W)
0 - The function is disabled.

Default setting: **50** (50W)
Parameter size: **2 [byte]**

Parameter No. 152 Percentage threshold of power report
Power percentage threshold to be interpreted, when change value of the load power exceeds the setting threshold, the smart plug will send meter report to association device (Group Lifeline).

Available settings: **0 - 255** (0 - 255%)
0 - The function is disabled.

Default setting: **10** (10%)
Parameter size: **1 [byte]**

Parameter No. 171 Power report frequency
The interval of sending power report to association device (Group Lifeline).

Available settings: **5- 2678400** (5 - 2678400s)
0 - The function is disabled.

Default setting: **30** (30s).
Parameter size: **4 [byte]**

Parameter No. 172 Energy report frequency
The interval of sending energy report to association device (Group Lifeline).

Available settings: **5- 2678400** (5 - 2678400s)
0 - The function is disabled.

Default setting: **300** (300s).
Parameter size: **4 [byte]**

Parameter No. 173 Voltage report frequency
The interval of sending voltage report to association device (Group Lifeline).

Available settings: **5- 2678400** (5 - 2678400s)
0 - The function is disabled.

Default setting: **0** (disabled).
Parameter size: **4 [byte]**

Parameter No. 174 Electricity report frequency
The interval of sending electricity report to association device (Group Lifeline).

Available settings: **5- 2678400** (5 - 2678400s)
0 - The function is disabled.

Default setting: **0** (disabled).
Parameter size: **4 [byte]**

X.FCC NOTICE (for USA)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications or change to this equipment. Such modifications or change could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.