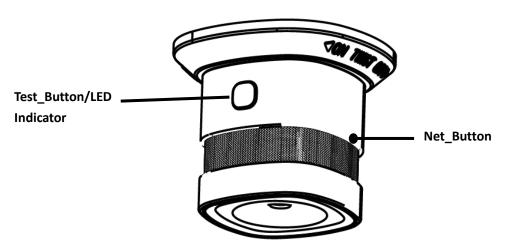
HS1SA-Z

Z-Wave Device Guide Document



1-Device Inclusion

- Click [Add] icon in Z-Wave PC Controller Program.
- Press the Net Button 3 times within 1.5s, Green LED is Blinking 3 times within 1 second.
- If Inclusion Process is successful, Green led will turn off.

2-Device Exclusion

- Click [Remove] icon in Z-Wave PC Controller Program
- Press the Net_Button 3 times within 1.5s
- If Exclusion Process is successful, Green led is Blinking 6 times, then turn off.

3-Device test mode

if Inclusion process is successful, Press Test_Button to test if the device is working normally. Red LED blinks 3 times when smoke is detected.

4-Device detection mode

if Inclusion process is successful, the device will report alarm information if detect the status change of smoke and no smoke . Red LED blinks quickly when smoke is detected.

5-Device Factory Reset

- -Long press Net_Button while installing batteries in HS1SA-Z.
- Device Reset Locally notification is Transmitted.
- -Please use this procedure only when the network primary controller is missing or otherwise inoperable.

6-Association & Association Group Information

- Lifeline between controller and HS1SA-Z
- Supported command classes

Battery report, Notification report, and Device Reset Locally notification, Binary report.

- Maximum supported nodes are 5.
- Association Group description

Association group 1: Lifeline association group

Include command classes: Battery report, Notification report, and Device Reset Locally notification, Binary report.

► Association group 2: Root Device group(Binary Sensor)

Binary Sensor Command Class: Compatible with 300 series

- 1- Binary Sensor reports status of smoke or no smoke via Lifeline.
- 2-When the sensor detects status change between smoke and no smoke, the device will be triggered.
- ► Association group 3: Root Device group(Notification)
- 1- Notification reports reports status of detect smoke or no smoke via Lifeline.
- 2- When the sensor detects status change between smoke and no smoke, the device will be triggered.

7-Notification Report

-Press or release test button, or smoke status is changed(smoke detected or no smoke detected) , Notification Report is transmitted

Notification Type	Event
Smoke Alarm (0x01)	Previous Events cleared
	(0x00)
	Smoke detected,
	Unknown Location(0x02)

8-Battery Report

- Battery Report is transmitted when power on the device.
- Battery Report is transmitted once a day.
- Battery Report is transmitted when the battery falls less than 10%

Battery Voltage	Battery Level
2.4V ~ 3.0V	10~ 100 (%)
Under 2.4V	0xFF

9-Wake up Notification

- Wake up Notification is transmitted every 24 hours by default.

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Wake up Notification is transmitted after Notification Report is Transmitted

10-Devices from multiple manufacturers in one network

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

11-Z-Wave Specifications

■ Device Type : Sensor - Notification

■ Role Type: RSS (Reporting Sleeping Slave)

■ Command Class Support/Control

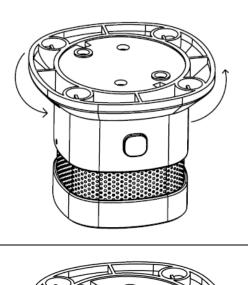
- Notification
- ▶ Device Reset Locally
- - **▶** Association

- Power Level
 - ▶Binary Sensor

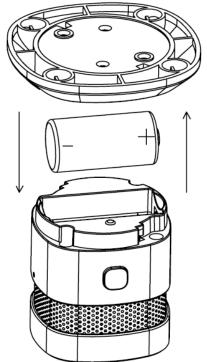
12-Indicate LED statues description-

status	LED status	Alarm sound
Normal	Red LED flash every 53s	No sound
Test mode	Red LED flash quickly	Sound "Di-Di-Di" loudly
Alarm	Red LED flash quickly	Sound "Di-Di-Di" loudly
Silence mode	Red LED flash 1 time every 10 seconds	No sound
Low battery	Red LED flash 1 time every 53 seconds	Sound "Di" every 53 seconds
Fault	Red LED flash 2 times every	Sound "Di" twice every 53
	53 seconds	seconds

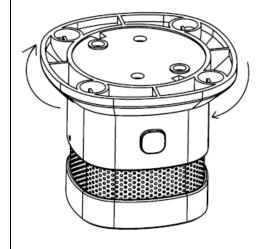
13-How to replace the batteries



Turn right to dismantle the mounting base of the device



1)take out battery from the device 2)Insert the battery into the device (You must be careful of the battery polarity)



Turn left to install the mounting base of the device

(before install the mounting base, you should must insert battery firstly, otherwise the mounting base will not be fixed)

14-Technical Specifications

Model No.	HS1SA-Z
RF frequency	868.40- 869.85 MHz
RF operating distance	Up to 100m outdoor line of sight
	Up to 40m indoor
Powered by	1 x CR123A
Temperature	-10°C~ 50°C
Humidity	95% max
Weight	69.2g (batteries)