HS-LS100+ Z-Wave Leak Sensor

OVERVIEW
HS-LS100+ is a compact, easy to install leak sensor. It is designed to control other Z-Wave devices directly or it may be used with a variety of Z-Wave certified home controllers to launch automation events or scenes.

Applications
- Use to activate Z-Wave devices such as sirens or water valve controllers when a leak is sensed.
- Use to trigger home automation events (aka “scenes”, “automations” or “robots”) when a leak is sensed.

Configuration
HS-LS100+ is battery powered and includes a Z-Wave network button, LED indicator and a magnetic wall mount/wired probe assembly. The unit may be deployed as a free-standing sensor (using built-in probes) or as a wired remote sensor (via the wall mount/wired probe assembly).

Z-Wave Network Installation
Remove the back cover by rotating counter-clockwise and install 1 ER14250 battery (included) inside HS-LS100+. Include the sensor into your Z-Wave network using the instructions below. Then, replace the back cover.

Note: HS-LS100+ may be included into your Z-Wave network as a “secure” device or as a “non-secure” device. Use the instructions below to include or exclude HS-LS100+ to/from your Z-Wave network.

Secure Inclusion (recommended if your home controller supports “S0” or “S2” Z-Wave encryption)
1. Put your home controller into Z-Wave ‘inclusion’ mode.
2. Press and hold the Z-Wave network button for 5 seconds, then release it. Wait for the inclusion process to finish.

Non-Secure Inclusion
1. Put your home controller into Z-Wave ‘inclusion’ mode.
2. Quickly press and release the Z-Wave network button once. Wait for the inclusion process to finish.

Exclusion
1. Put your home automation controller into Z-Wave ‘exclusion’ mode.
2. Quickly triple-press the Z-Wave network button. Wait for the exclusion process to finish.

Reset (Use this procedure to reset HS-LS100+ to factory settings when the Z-Wave controller is missing or inoperable).
1. Press and hold the Z-Wave button for 20 seconds. Release the button once the LED stops blinking and glows solidly.

Physical Installation
Free-standing installation: Simply place the leak sensor on a flat horizontal surface in the area where a leak might occur.
Remote installation: Install the included magnetic wall mount/wired probe assembly in the location of your choice (using the supplied mounting hardware) and attach the HS-LS100+ to it by aligning the 3 probes with the 3 holes in the mounting bracket. Position and install the wired probe in the area where a leak might occur or where you wish to detect liquid.

Leak Sensor Operation
HS-LS100+ is designed to transmit a Z-Wave command when liquid is sensed. It will also transmit another command when liquid is no longer sensed.

Shock Sensor Operation
The shock sensor is designed to transmit a Z-Wave command when HS-LS100+ has been physically moved. This sensor is especially helpful in determining whether the unit has been removed from its mount or tampered with.
Battery Sensor Operation

The battery sensor is designed to report battery level with a Z-Wave command every 43200 seconds (12 hours). If desired, HomeSeer users can adjust this interval (0-2678400 seconds) by accessing the settings on the Z-Wave tab of the root device.

Z-Wave Association Information

HS-LS100+ supports Group 1 association. Group 1 reports the sensor's status and battery if running on batteries.

Notes

- If your home controller supports “S2” security encryption, the Leak Sensor may be added as a ‘secure’ device to your network. If not, it will add as a non-secure device. This will not effect the functionality of the unit.
- For more information, visit homeseer.com.

### ADVANCED CONFIGURATION

(available via the “Root device” in a HomeSeer System. Before adjusting these settings, tap the network button 4 times to wake the unit.)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Settings</th>
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</table>
| 14        | Enable / Disable Basic Set Command  
        Available: 0=disable, 1=enable  
        Default: 0 | Size: 1 byte |
| 15        | Set Value for Basic Set Command  
        Available: 0=Sends 255 value when leak sensed  
        Available: 1=Sends 0 value when leak sensed  
        Default: 0 | Size: 1 byte |
| 17        | Leak Report Interval  
        Available: 0=disable, 1 to 255 (minutes)  
        Default: 5 | Size: 1 byte |
| 18        | Enable Shock Sensor  
        Available: 0=disable, 1=enable  
        Default: 0 | Size: 1 byte |
| 19        | Temperature Report Interval  
        Available: 0=disable, 1 to 255 (minutes)  
        Default: 0 | Size: 1 byte |
| 20        | Set High Temperature Trigger Value  
        Available: -670 to 2570 (-67 to 257 °F)  
        Default: 1040 (104 °F) | Size: 2 bytes |
| 22        | Set Low Temperature Trigger Value  
        Available: -670 to 2570 (-67 to 257 °F)  
        Default: 320 (32 °F) | Size: 2 bytes |
| 24        | Enable Blinking LED When Alarm Triggers  
        Available: 0=disable, 1=enable  
        Default: 1 | Size: 1 byte |
| 32        | Set Value for Low Battery  
        Available: 10-50 (%)  
        Default: 20 (%) | Size: 1 byte |

**Note:** Parameter 18 (“Enable Shock Sensor”) and parameter 19 (“Temperature Report Interval”) are disabled by default, to conserve battery life.

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Operating Temp Range</th>
<th>0°C to 40°C</th>
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<tbody>
<tr>
<td>Power</td>
<td>Requires (1) ER14250 Battery</td>
</tr>
<tr>
<td>Z-Wave Frequency</td>
<td>908 MHz (US)</td>
</tr>
<tr>
<td>Z-Wave Range</td>
<td>Up To 300 Ft line of sight</td>
</tr>
<tr>
<td>Z-Wave Certification</td>
<td>Z-Wave Plus</td>
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<tr>
<td>Dimensions</td>
<td>Sensor (main unit): 2.75 x 2.75 x .75 (inches)</td>
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### LIMITED WARRANTY

HomeSeer Technologies, LLC will repair or replace, at its option, any part of the device, which proves to be defective in workmanship or material under normal use, in the USA except in the states of Alaska or Hawaii, for a period of one year from the date the device is purchased. During the warranty period, HomeSeer Technologies, LLC will repair and provide all parts necessary to correct such defects, free of charge, provided the device has been operated in accordance with the manufacturer’s guidelines. The Customer will return the device to HomeSeer Technologies, LLC for testing and repair or replacement. Should you need service, during warranty period or beyond, contact HomeSeer to obtain return authorization before shipping your device to HomeSeer Technologies, LLC.