

Datasheet INFIBITY WATER LEAK SENSOR

INF-203-Z-01

Infibity Water Leak Sensor is a wireless (Z-Wave) sensor that allows for detecting leaks and is compatible with the Grenton Smart Home system. The module can be powered by batteries.



1. Parameters - ZWAVE BINARY SENSOR

Features:	
Value	Returns input value (0 - no leak, 1 - leak detected)
Events:	
OnValueChanged	Occurs when a change in the input state takes place (regardless of the value)
OnSwitchOn	Occurs when the high state is set at input
OnSwitchOff	Occurs when the low state is set at input

2. Parameters - ZWAVE BATTERY

Features:	
BatteryLevel	Z-Wave module battery level (in %)
WarningLevel	Z-Wave module battery level below which the warning event is occurring
Methods:	
SetWarningLevel	Sets Z-Wave battery level below which the warning event is occurring
Events:	
OnBatteryLevelChange	Event occurring after Z-Wave module battery level change
OnLowBattery	Event occurring after Z-Wave module battery level drop below the WarningLevel
OnBatteryGood	Event occurring when the Z-Wave module battery level increase above the WarningLevel
OnBatteryDischarge	Event occurring when the Z-Wave module reports battery discharge

3. Parameters - ZWAVE WAKEUP

Features:	
Interval	Z-Wave module awakening period from sleep mode
LastWakeUp	Time from the last Z-Wave module awakening
Methods:	
SetInterval	Sets Z-Wave module awakening time from sleep mode
Events:	
OnWakeUp	Event occurring after detecting Z-Wave module waking up from sleep mode

4. Parameters - ZWAVE CONFIG

Features:	
Register	Register (parameter) number
Value	Register (parameter) value
NodeID	Module's number (node) in the Z-Wave network
Banned	Returns information about communication with module: 0 - communication with the module is not blocked, 1 - blocked communication with the module (module banned)
FailCount	The number of failed communication attempts with the Z-Wave module
Methods:	
Set	Sets the value of the register (parameter)
Get	Gets the value of a given register (parameter)
SetDefault	Sets the default value for register (parameter)
RemoveBan	Removes the blockade of communication with the Z-Wave module
ClearFailCount	Cleans the number of failed communication attempts
Events:	
OnBanned	Occurs when Z-Wave device is banned

5. Technical data

Power	CR2-3V x1
Standby current	3µA
Battery life	2 years
Operational temperature	0-45°C
Radio frequency	868.4MHz EU
Range	Up to 40m indoors (depending on the building structure), up to 80m outdoors
Size (L x W x H)	68 x 68 x 34mm

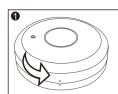
6. Installation Steps

Holder Installation:



Fix the holder with screws and screw stopper

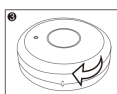
Battery Installation:



Open the water sensor

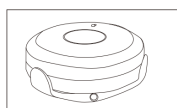


Install the battery



Close the water sensor

Fix the leak sensor on the holder:



NOTE: When assembling the leak sensor, please align the assembly mark. When fixing the leak sensor on the holder, please align the induction foot and the induction contact.

7. The Status of LED

Red	Light On 1s when Power On - Not added to the Z-Wave network Light on always - Water leakage is detected
Green	Light On 1s when Power On - Added to the Z-Wave network
White	Light On 2s - Waiting time
Blue	Blink with 1s Interval - Add to Z-Wave network
	Blink with 500ms Interval - Remove from Z-Wave network
Pink	Light On 2s - Waiting time

8. Module Inclusion

To add the device to the Z-Wave network:

1. Disassemble the main body of the sensor and install the battery.
2. Set your Z-Wave controller into inclusion mode.
3. Press and hold the button on the sensor for 5s until the white LED lights up. The module will enter inclusion mode - the blue LED will start blinking every 1s.
4. The green LED will light up for 1 second at the end of the Inclusion process.

If you are connecting this unit to a Z-Wave Controller that utilizes the S2 security protocol, you may be asked to enter the first 5 digits of Device Specific Key (DSK). You can find it on the label with QR code on the back of the unit.

The device supports SmartStart function. SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR Code present on the product with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity. The device provides DSK representation on the product, so you can add it manually to the controller.

9. Module Exclusion

To remove the device from the Z-Wave network:

1. Make sure the leak sensor is powered on.
2. Set your Z-Wave controller into exclusion mode.
3. Press and hold the button on the sensor for 5s until the white LED lights up. The module will enter exclusion mode - the blue LED will start blinking every 500ms.
4. The red LED will light up for 1 second at the end of the Exclusion process.

10. Factory Reset

To restore factory configuration:

1. Disassemble the main body of the sensor.
2. Make sure the leak sensor is powered on.
3. Press and hold the button on the sensor for 10s until the pink LED lights up.
4. The red LED will light up for 1 second at the end of the Factory Reset process.

11. Parameter Configuration

NOTE: The parameter setting change must be preceded by waking up the module (pressing the button on the module), just before sending the new setting.

1. Alarm Duration Time

Setting the duration of the sound alarm and LED indication in case of water leakage detection, expressed in minutes.

Parameter	Size	Settings	Default
1	1 Byte	0..120	120

2. Alarm Interval Time

Setting the interval for turning on/off the sound signal in case of water leakage detection, expressed in seconds.

Parameter	Size	Settings	Default
2	1 Byte	5..120	60

3. First Alarm On Time Duration

Setting the time for the first activation of the sound signal in case of water leakage detection, expressed in seconds.

Parameter	Size	Settings	Default
3	1 Byte	10..120	60

4. Alarm On Time Duration

Setting the time for the activation of subsequent sound signals in case of water leakage detection, expressed in seconds.

Parameter	Size	Settings	Default
4	1 Byte	5..120	5

5. Water Leakage Detected Disable

Setting '0' disables the water leakage detection function.

Parameter	Size	Settings	Default
5	1 Byte	0,1	1

6. Beep Alarm Disable

Setting '0' disables the sound signal.

Parameter	Size	Settings	Default
6	1 Byte	0,1	1

7. Led Light Alarm Disable

Setting '0' disables the LED indicator.

Parameter	Size	Settings	Default
7	1 Byte	0,1	1

8. Basic Set Level

Setting the level for device sending BASIC_SET to nodes that associated in group 2. [0] - Off, BASIC_SET = 0x00, all nodes associated in group 2 will be off. [1..99] - On, BASIC_SET = [Value], [100] - On, BASIC_SET = 0xFF.

Parameter	Size	Settings	Default
8	1 Byte	0..100	100

9. Binary Sensor Report Enable

Setting '1' enables SENSOR_BINARY_REPORT when the device detects a water leakage event.

Parameter	Size	Settings	Default
9	1 Byte	0,1	0

12. Tips

- Do not install in the place near water vapor or smoke.
- Do not install the leak sensor main body and the probe in the place where water is soaked.
- The sensor probe should be placed on the surface of the water leakage.
- It is important to ensure that the sensor is within the range of the Z-Wave network.

13. Command Classes

Command Classes:

- COMMAND_CLASS_ZWAVEPLUS_INFO (V2)
- COMMAND_CLASS_SECURITY (V1)
- COMMAND_CLASS_SECURITY_2 (V1)
- COMMAND_CLASS_TRANSPORT_SERVICE (V2)
- COMMAND_CLASS_VERSION (V3)
- COMMAND_CLASS_POWERLEVEL (V1)
- COMMAND_CLASS_ASSOCIATION (V2)
- COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION (V3)
- COMMAND_CLASS_ASSOCIATION_GRP_INFO (V1)
- COMMAND_CLASS_MANUFACTURER_SPECIFIC (V2)
- COMMAND_CLASS_DEVICE_RESET_LOCALLY (V1)
- COMMAND_CLASS_NOTIFICATION (V8)
- COMMAND_CLASS_SENSOR_BINARY (V2)
- COMMAND_CLASS_INDICATOR (V3)
- COMMAND_CLASS_CONFIGURATION (V4)
- COMMAND_CLASS_SUPERVISION (V1)
- COMMAND_CLASS_FIRMWARE_UPDATE_MD (V5)
- COMMAND_CLASS_BATTERY (V1)
- COMMAND_CLASS_WAKEUP (V2)

14. Device Application

The device is not intended for use in any security systems. Data from the device is for informational purposes only and may contain inaccuracies.

Under no circumstances shall Grenton Sp. z o.o. be liable for damages arising from the use of the device and/or information provided by Grenton Sp. z o.o. contrary to its intended purpose.

15. CE Marking

The manufacturer declares that the device is in full compliance with the requirements of EU legislation that includes the directives of a new approach appropriate for this equipment. In particular, Grenton Sp. z o. o. declares that the device fulfills the requirements on safety, specified by law, and that it conforms

to the national regulations that implement the appropriate directives: The Directive on the electromagnetic compatibility (EMC - 2014/30/UE) and the Directive on the limitation of the use of specific substances in electrical and electronic equipment (RoHS II - 2011/65/UE).



16. Warranty

The warranty is available at: www.infibity.com/warranty

17. Manufacturer Contact Details

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