Minoston®

MSE30Z
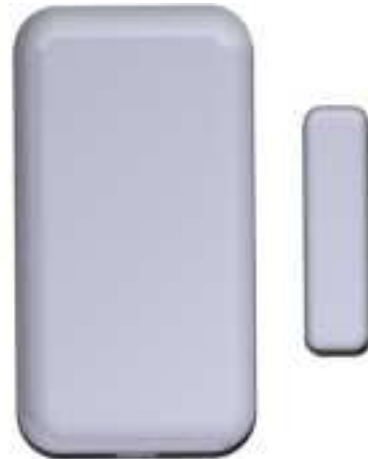# Z-Wave Plus Multipurpose Sensor

FEDERAL COMMUNICATIONS COMMISSION(FCC)STATEMENT FCC CautionThis 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. Any Changes or modifications not expressly approved by the party responsible for compliance could void the users authority to operate the equipment.

NOTE: 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 RulesThese 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.

Z-Wave Plus Multipurpose Sensor

WARRANTY

Minoston Products warrants this product to be free from manufacturing defects for a period of two years from the original date of consumer purchase. This warranty is limited to the repair or replacement of this product only and does not extend to consequential or incidental damage to other products that may be used with this product.

This warranty is in lieu of all other warranties, expressed or implied. Some states do not allow limitations on how long an implied warranty lasts or permit the exclusion or limitation of incidental or consequential damage, so the above limitations may not apply to you.

This warranty gives you specific rights, and you may also have other rights which vary from state to state. if the unit should prove defective within the warranty period.

SPECIFICATIONS

Model:MSE30Z

Power: CR2450 3V

Signal (Frequency): 908.42 MHZ.

Range: Up to 100 feet line of sight between the Wireless Controller and the closest Z-Wave™ receiver module.

Operating Temperature Range: 5-104° F (-10-40° C)

Specifications subject to change without notice due to continuing product improvement

Website:www.nie-tech.com

WARNING

RISK OF FIRE

RISK OF ELECTRICAL SHOCK

RISK OF BURNS

CONTROLLING APPLIANCES:

EXERCISE EXTREME CAUTION WHEN USING Z-Wave™ DEVICES TO CONTROL APPLIANCES. OPERATION OF THE Z-Wave™ DEVICE MAY BE IN A DIFFERENT ROOM THAN THE CONTROLLED APPLIANCE, ALSO ANUNINTENTIONAL ACTIVATION MAY OCCUR IF THE WRONG BUTTON ON THE REMOTE IS PRESSED. Z-Wave™ DEVICES MAY AUTOMATICALLY BE POWERED ON DUE TO TIMED EVENT PROGRAMMING. DEPENDING UPON THE APPLIANCE, THESE UNATTENDED OR UNINTENTIONAL OPERATIONS COULD POSSIBLY RESULT IN A HAZARDOUS CONDITION. FOR THESE REASONS, WE RECOMMEND DO NOT RETURN THIS PRODUCT TO THE STORE THE FOLLOWING:

DO NOT USE Z-Wave™ DEVICES TO CONTROL ELECTRIC HEATERS OR ANY OTHER APPLIANCES WHICH MAY PRESENT A HAZARDOUS CONDITION DUE TO UNATTENDED OR UNINTENTIONAL OR AUTOMATIC POWER ON CONTROL.

Introduction:

This product can be operated in any Z-Wave network with other Z-Wave Plus™ certified devices from other manufacturers.
This product is a Multipurpose Sensor, it have door/window sensor and Temperature Humidity sensor.
This product is a battery power ,It's sleep most of the time.
MSE30Z is a security enabled Z-Wave Plus™ device. A security Enabled Z-Wave Plus™ Controller must be used in order to fully utilize the product.
The GENERIC_TYPE of the MSE30Z is GENERIC_TYPE_SENSOR_NOTIFICATION
The SPECIFIC_TYPE of the MSE30Z is SPECIFIC_TYPE_NOTIFICATION_SENSOR

Key Features:

---Checks and sends the status of the gate
---Detects and sends ambient temperature
---Detects and sends ambient humidity
---Support Association Group and Auto Report switch status
---Support firmware upgrades via Over-the-air (need Gateways support)

Product Overview:

A.   z-wave program button
B.   Magnet detection point
C.   Temperature and humidity detection point
D.   The magnet
E.   Power: CR2450 3V

Back   Front

Key function description

Function 1:   quickly press 3x button: inclusion (only if sensor is not included in network)quickly press 3x button: exclusion
Function 2:   quickly press 5x button :Wake-up the device
Function 3:   Press click Z-Wave button 3 times quickly,and hold the third time for at least 10 seconds. to restore the device to the factory.
               (Node:Please use this procedure only when the network primary controller is missing or otherwise inoperable.)

Adding Your Device To A Hub

The device support two methods of inclusion,When using a Z-Wave Plus™ certified controller choose Network Wide Inclusion or SmartStart,
Network Wide Inclusion To A Z-Wave™ Network
   1,Refer to your primary controller instructions to process the inclusion / exclusion setup procedure.
   2,When prompted by your primary controller, click the z-wave button three times in one second.
The device is compatible with SmartStart
SmartStart enabled products can be added into a Z-Wave™ network by scanning the Z-Wave QR Code found on the top of the outlet or the back of
the box 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 and in the network vicinity.

QR CODE

the QR code are sticked to the side of the case,DSK is included in the QR code.
DSK
The DSK code can be found on the DSK label which is attached on the packaging box.

Command Class

Command Clas	Version	Required Security Class
Z-Wave Plus Info	V2	none
Configuration	V4	highest granted
Association	V3	highest granted
Multi Channel Association	V4	highest granted
Association Group Information	V3	highest granted
Transport Service	V2	none
Version	V3	highest granted
Manufacturer Specific	V2	highest granted
Device Reset Locally	V1	highest granted
Powerlevel	V1	highest granted
Security 2	V1	none
Supervision	V1	none
Firmware Update Meta Data	V5	highest granted
Battery	V1	highest granted
Indicator	V3	highest granted
Sensor Binary	V2	highest granted
Notification	V8	highest granted
Sensor Multilevel	V11	highest granted
Wake Up	V2	highest granted

Z-Wave™ Configuration Parameters

You may use the below configuration parameters to change settings of the corresponding functionality.

The device needs to be woken up during setup

Number	Name	Information	Format / Size	Read Only	Altering	Advanced	MIN	MAX	Default	Value Description	Change
1	Battery report threshold	When battery level exceeds threshold, the unit need to report to hub.	1 byte unsigned integer	NO	NO	NO	1	20	10	1 - 1% 2 - 2% ~ 20 - 20%	Only can be changed by HUB
2	Low battery alarm report threshold	Setting the threshold for low battery alarm report.	1 byte unsigned integer	NO	NO	NO	5	20	5	5 - 5% 6 - 6% ~ 20 - 20%	Only can be changed by HUB
3	state of the door sensor	Parameter defines state of the sensor when the magnet closes the reed	1 byte unsigned integer	NO	NO	NO	0	1	0	0 - door/window closed when magnet closes the reed 1 - door/window opened when magnet closes the reed	Only can be changed by HUB
4	Door close send command time	Delay in seconds When door closed	2 bytes unsigned integer	NO	NO	NO	0	3600	0	0 - instantly 1 - 1 second ~ 3600 - 3600 seconds	Only can be changed by HUB
5	Door open send command time	Delay in seconds when door opened	2 bytes unsigned integer	NO	NO	NO	0	3600	0	0 - instantly 1 - 1 second ~ 3600 - 3600 seconds	Only can be changed by HUB
6	Temperature report threshold	Minimum Temperature change to report	1 byte unsigned integer	NO	NO	NO	1	9	2	1 - 1°C 2 - 1.5°C 3 - 2°C 4 - 2.5°C 5 - 3°C 6 - 3.5°C 7 - 4°C 8 - 4.5°C 9 - 5°C	Only can be changed by HUB
7	Humidity report threshold	Minimum Humidity change to report	1 byte unsigned integer	NO	NO	NO	5	20	10	5 - 5% 6 - 6% ~ 20 - 20%	Only can be changed by HUB
8	Temperature Upper	Temperature Upper Watermark value	1 byte unsigned integer	NO	NO	NO	0	50	0	0 - Disable 1 - 1°C ~ 50 - 50°C	Only can be changed by HUB
9	Temperature Lower	Temperature Lower Watermark value	1 byte unsigned integer	NO	NO	NO	0	50	0	0 - Disable 1 - 1°C ~ 50 - 50°C	Only can be changed by HUB
10	Humidity Upper	Humidity Upper Watermark value	1 byte unsigned integer	NO	NO	NO	0	100	0	0 - Disable 1 - 1% ~ 100 - 100%	Only can be changed by HUB
11	Humidity Lower	Humidity Lower Watermark value	1 byte unsigned integer	NO	NO	NO	0	100	0	0 - Disable 1 - 1% ~ 100 - 100%	Only can be changed by HUB
12	Temperature unit	Switch the unit of temperature report	1 byte unsigned integer	NO	NO	NO	0	1	1	0 - Celsius 1 - Fahrenheit	Only can be changed by HUB
13	Group 2 Function	Association Group 2 Setting	1 byte unsigned integer	NO	NO	NO	0	6	1	0 - Disable 1 - Send Basic SET OnFF when Magnet is away, and send Basic SET 0x00 when Magnet is near. 2 - Send Basic SET 0x00 when Magnet is away, and send Basic SET OnFF when Magnet is near. 3 - Only send Basic SET OnFF when Magnet is away. 4 - Only send Basic SET 0x00 when Magnet is near. 5 - Only send Basic SET 0x00 when Magnet is away. 6 - Only send Basic SET OnFF when Magnet is near.	Only can be changed by HUB

Support for Notification

Type	Events	Description
Access Control(0x06)	0x16(Window/Door is open)	Open status.
Access Control(0x06)	0x17(Window/Door is closed)	Close status.
Heat Alarm(0x04)	0x02(Overheat) 0x06(Underheat)	Air temperature is high. Air temperature is low.
Weather Alarm(0x10)	0x02(Weather Alarm)	Air humidity is high or low.

Basic Set Mapping

- Basic CC does not map to any Command Class.

Indicator Command Class

- The indicator (blue color) will flashes according the indicator set command received from HUB.

Support for Association Groups

Association Group

ID	Name	Node Count	Profile	Function
1	Lifeline	5	General: Lifeline	**Device Reset Locally Notification:** Issued when Factory Reset is performed. **Battery Report:** Issued periodically to report the current battery level; Issued when battery becomes low. **Sensor Binary Report:** Issued when Magnet is away or near. **Notification Report(Type=0x06;Event=0x16:** Issued when sensor state is changed to be Open Status. **Notification Report(Type=0x06;Event=0x17):** Issued when sensor state is changed to be Close Status. **Indicator Report:** Issued when included successfully. **Sensor Multilevel Report:** Issued when air temperature changed exceeds the value determined by Parameter 6; Issued when air humidity changed exceeds the value determined by Parameter 7.
2	Basic Set when door triggered	5	Notification: Access Control	**Basic Set:** Issued when Magnet is away or near.(The Basic Set Value is determined by Parameter 13)
3	Basic Set when temperature high	5	Notification: Heat Alarm	**Basic Set:** Issued when the air temperature exceeds the value determined by Parameter 8.
4	Basic Set when temperature low	5	Notification: Heat Alarm	**Basic Set:** Issued when the air temperature exceeds the value determined by Parameter 9.
5	Basic Set when humidity high	5	Notification: Weather	**Basic Set:** Issued when the air humidity exceeds the value determined by Parameter 10.
6	Basic Set when humidity low	5	Notification: Weather	**Basic Set:** Issued when the air humidity exceeds the value determined by Parameter 11.

Restoring Factory Defaults

MSE30Z is removed from the network and will be restored to the factory setting
All Configuration Parameters values and Association information will be restored to factory default settings and excluded from the network.
Manual Reset:Press click Z-Wave button 3 times quickly,and hold the third time for at least 10 seconds. to restore the device to the factory.
Remark : All the setting and data will be permanently deleted.
Please use this procedure only when the network primary controller is missing or otherwise inoperable.