Product Description and Specification:

Specification:

Protocol: Z-Wave™ (ZGM130S)
Frequency Range:

865.22 MHz	(ZD2106IN-7)
868.10 MHz	(ZD2106MY-7)
868.42 MHz	(ZD2106EU-7)
869.00 MHz	(ZD2106RU-7)
908.42 MHz	(ZD2106US-7)
916.00 MHz	(ZD2106IL-7)
919~923 MHz	(ZD2106KR-7)
919.80 MHz	(ZD2106HK-7)
922~926 MHz	(ZD2106JP-7)
921.42 MHz	(ZD2106BR-7)

Operating Range: Up to 100 feet line of sight
Operating Temp.: -15°C~ 60°C (5°F ~140°F)
Battery: CR2 * 1PC

Package Content

1pc	ZD 2106-7 Door Sensor
1pc	Magnet
1pc	CR2032 Lithium Battery
1pc	Accessory Pack
1pc	Installation & Operation manual

FCC Freq./ Date rate spec. :
908.42MHz for 9.6 kbps
908.40MHz for 40 kbps
916.00MHz for 100 kbps

Z-Wave Command Classes:

COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_BATTERY
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V5
COMMAND_CLASS_INDICATOR_V3
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_NOTIFICATION_V8
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_SECURITY
COMMAND_CLASS_SECURITY_2
COMMAND_CLASS_SUPERVISION
COMMAND_CLASS_TRANSPORT_SERVICE_V2
COMMAND_CLASS_VERSION_V3
COMMAND_CLASS_WAKE_UP_V2
COMMAND_CLASS_ZWAVEPLUS V2_INFO
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V4

Z-Wave S2 Support Command Classes :

COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_BATTERY
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V5
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_NOTIFICATION_V8
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_SUPERVISION
COMMAND_CLASS_VERSION_V3
COMMAND_CLASS_WAKE_UP_V2

Notification V8 Type	SWITCH TYPE	STATUS
Notification Type	Reed Switch	0x06
	Tamper Switch	0x07
Event	Reed Switch	Close:0x07 Open:0X16
	Tamper Switch	Close:0x00 Open:0X03

Basic Set:		
	Open	Close
Reed Switch	0xFF	0x00

ZD 20106-7	V0	1081219	

VISION ®

Installation & Operation Manual

Door/ Window Sensor

ZD2106IN-7
ZD2106MY-7
ZD2106EU-7
ZD2106RU-7
ZD2106US-7
ZD2106IL-7
ZD2106KR-7
ZD2106HK-7
ZD2106JP-7
ZD2106BR-7

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Introduction

Thanks for choosing the Vision's wireless door/window sensor of the home security device. This sensor is a Z-Wave™ PLUS V2 enabled device (interoperable, two-way RF mesh networking technology) and is fully compatible with any Z-Wave™ enabled network and it's security framework. Every mains powered Z-Wave PLUS V2 enabled device acts as a signal repeater and multiple devices result in more possible transmission routes which helps eliminate "RF dead-spots"

Z-Wave™ PLUS V2 enabled devices displaying the Z-Wave™ PLUS V2 logo can also be used with it regardless of the manufacturer, and ours can also be used in other manufacturer's Z-Wave™ PLUS V2 enabled networks. Monitors door and window. Sends Z wave signal when door or window opening or closing. Lower power consumption, longer operating distance and battery life. Improving RF communication. When the device is secure included into Z-Wave network, above communication will be encrypted. ZD2106 supports SECURITY S0 / SECURITY S2 UNAUTHENTICATED / SECURITY S2 AUTHENTICATED.

Limited Warranty

Vision Guarantees that every wireless door/window sensor is free from physical defects in material and workmanship under normal use for one year from the date of purchase. If the product proves defective during this one-year warranty period, Vision will replace it free of charge. Vision does not issue any refunds. This warranty is extended to the original end user purchase only and is not transferable. This warranty does not apply to: (1) damage to units caused by accident, dropping or abuse in handling, or any negligent use; (2) units which have been subject to unauthorized repair, taken apart, or otherwise modified; (3) units not used in accordance with instruction; (4) damages exceeding the cost of the product; (5) transit damage, initial installation costs, removal cost, or reinstallation cost. For information on additional devices, please visit us at www.visionsecurity.com.tw
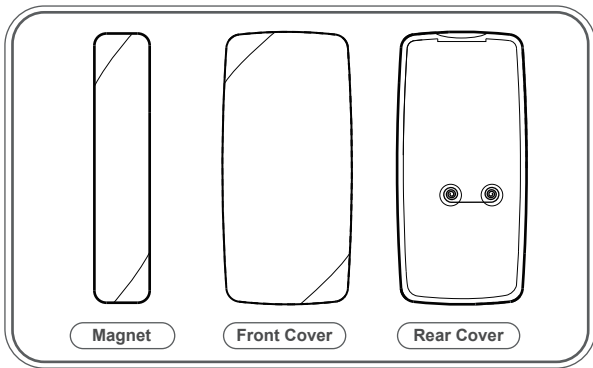
Federal Communications Commission Statement

This equipment has been followed to comply with Part 15 of the FCC Rules. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, 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 and correct the interference by one of the following measures:
-Reorient or relocate the receiving antenna,
-Increase the separation between the equipment and receiver,
-Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.
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 undesirable operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Magnet | **Front Cover** | **Rear Cover**

1 Opening/Closing the door/window to separate the magnet from the sensor or remove the rear will send signal to any association nodes accordding to the Status/Signal table (Notification V8 Type) and the LED will flash once; ZD2106 will send signal according the status / signal table (Notification V8 Type) after closing the cover back.

2 Normal operation, the LED will not light.

3 If the cover of sensor is removed, the LED will flash once and send "Wake Up Notification" after 10 seconds.

Installation

Notice: If you are installing the entire Z-Wave™ system for the first time, please refer to the installation guide of Z-Wave™ Interface Controller before installing ZD2106.

1 For "**Inclusion**" in (adding to) a network: Put the Z-Wave™ Interface Controller into "inclusion" mode, and following its instruction to add the ZD2106 to your controller. To get in the "inclusion" mode, make sure the rear cover has been closed firmly and trigger the reed switch (close & open) 3 times within 5 seconds for sending the NIF. After sending NIF, Z-Wave will send the auto inclusion; otherwise, ZD2106 will go to sleep after 30 seconds.

For "**Exclusion**" from (removing from) a network: Put the Z-Wave™ Interface Controller into "exclusion" mode, and following its instruction to delete the ZD2106 from your controller. Make sure the rear cover has been closed firmly and trigger the reed switch (close & open) 3 times within 5 seconds for sending the NIF to be excluded.
Note: All user and network settings will be cleared and the device reset to factory defaults when the device is excluded.

2 Wake Up Notification:
Remove the rear cover, ZD2106 will be "Wake Up Mode" for receiving all the command class from controller and waiting for 10 seconds to send Wake Up Notification. If ZD2106 received "Wake Up No More Information" command then the ZD2106 will go to sleep mode or it will wait 10 seconds then go sleep mode. It will proceed all the commands after sending the "Wake Up Notification"

3 Auto Wake Up:
Use "Wake Up" command to set up the awaking time and send the wake up notification to controller. User can use command to change the auto wake up from 10 minutes to 194 days, Interval increment is 200 seconds, the default Auto Wake Up interval is 24 hours.

4 Battery Capacity Detection:
Use "Battery Get" command to have the battery capacity back in %. It will detect the battery capacity automatically. Low Battery Auto Report (low battery is set as 2.4+/-0.1 Voltage).

5 Association:
- Support two groups with 5 nodes / each group
- Group 1 = Lifeline
- Group 2 = On/Off Control
- All triggering reports & low voltage report will be sent to the associated nodes
- "Association" is used for other grouping devices chain reaction.

6 Support Explorer Frame Function

7 All the rest commands depend on Z-Wave standard

8 Factory Default Reset:
Open the rear cover to trigger the rear cover switch for sending the Alarm Report and trigger the reed switch (close & open) 10 times in 10 seconds, ZD2106 will send the "Device Reset Locally Notification" command and reset to the factory default.
(Remark: This is to be used only in the case of primary controller being inoperable or otherwise unavailable.)

9 Support OTA Firmware update from controller. Please refer to your controller manual. Once OTA function success, we recommend you exclusive the device & inclusive again before use the device.

10 Support SECURITY S0, SECURITY S2 UNAUTHENTICATED & SECURITY S2 AUTHENTICATED.

11 Support SmartStart, please scan the QR Code from ZD2106 for SmartStart. QR code and PIN is located on the device, also there is a Full DSK string on the enclosed DSK card. Please keep DSK card carefully for future inclusion needed.

12 A Security Enabled Z-Wave Controller must be used to fully utilize the products.