Federal Communications Commission Statement

FCC Statement
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 undesired operation.

FCC Caution
To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance
may void the user's authority to operate his equipment. (Example – use only shielded interface cables when connecting to computer or peripheral devices)

FCC Statement in User's Manual (for class B) FCC Section 15.105 "Federal Communications Commission (FCC) Statement"
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 Rules. These 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.

IMPORTANT NOTE :
FCC Radiation Exposure Statement :
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
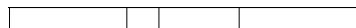
Limited Warranty

Vision Guarantees that every wireless PIR 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

Installation & Operation Manual

ZP3113IN-7
ZP3113EU-7
ZP3113RU-7
ZP3113US-7
ZP3113BR-7
ZP3113IL-7
ZP3113HK-7
ZP3113TH-7
ZP3113KR-7
ZP3113JP-7

4-in-1 Motion Sensor
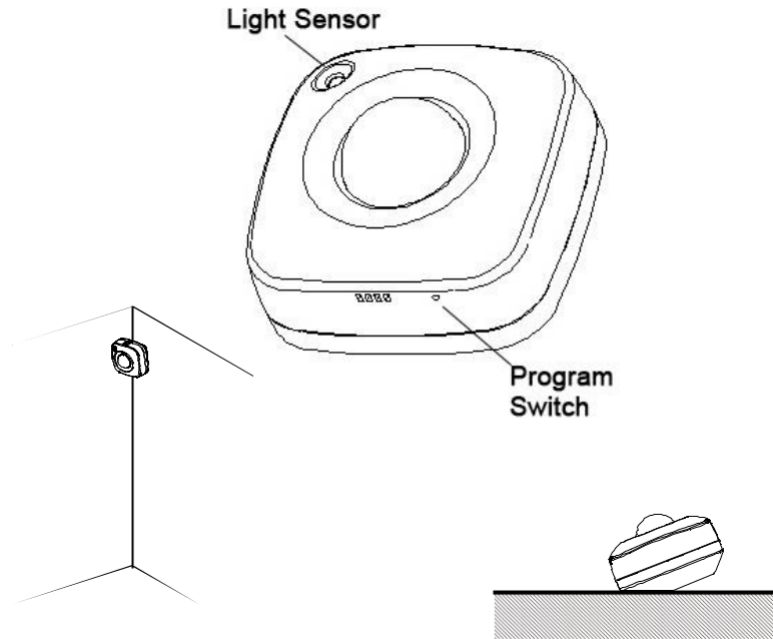# (Temp./Humidity/Light Sensor Built-In)

Introduction

Thanks for choosing the Vision's wireless 4-in-1 Motion sensor of the home security device. The new multi-sensor consists of motion, temperature, humidity & light sensor for combing several functionality in one device; more attractive and economic consideration. This sensor is a Z-Wave ^{TM} enabled device (interoperable, two-way RF mesh networking technology) and is fully compatible with any Z-Wave ^{TM} enabled network and it's security framework. Every mains powered Z-Wave ^{TM} enabled device acts as a signal repeater and multiple devices result in more possible transmission routes which helps eliminate "RF dead-spots".

Z-Wave ^{TM} enabled device displaying the Z-Wave ^{TM} logo can also be used with it regardless of the manufacturer, and ours can also be used in other manufacturer's Z-Wave ^{TM} enabled networks. This sensor monitors movement, and send Z-Wave ^{TM} signal when movement is detected inside the building. With Temperature, Humidity & Light sensor built inside, it will send the signal out when temperature, humidity & Lightness changed. When the device is secure included into Z-Wave network, above communication will be encrypted.
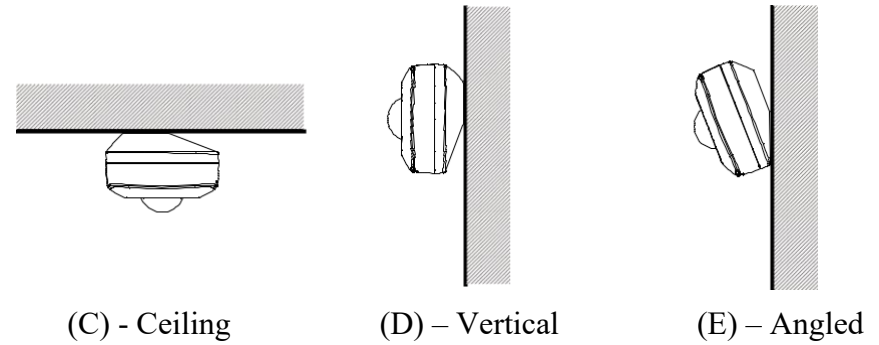
Product Description and Specification

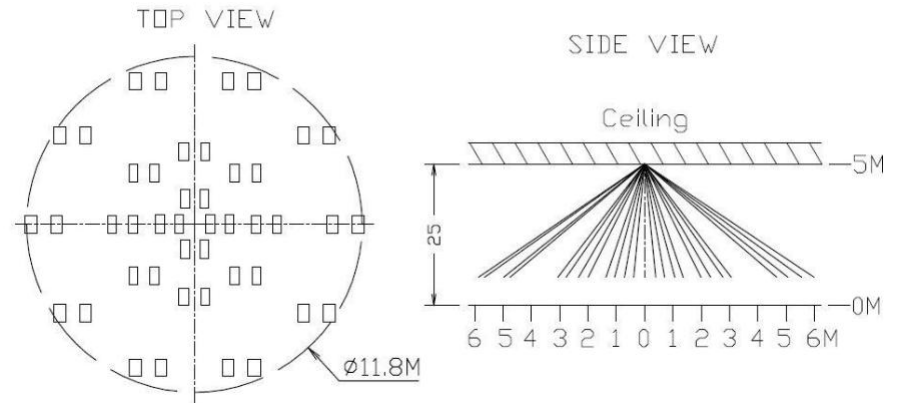*** For indoor use only ***

(A) – Wall Corner   (B) – Table

(C) - Ceiling   (D) – Vertical   (E) – Angled

Specification:		Package Content:	
Protocol: Z-Wave™ (ZGM130S)		1pc	ZP 3113 Multi-Sensor
Frequency Range:		1pc	Adhesive tape for sensor
865.22MHz (ZP3113IN-7)		1pc	CR123A Lithium Battery
868.42MHz (ZP3113EU-7)		1pc	Installation & Operation Manual
869.00MHz (ZP3113RU-7)			
908.42MHz (ZP3113US-7)			
916.00MHz (ZP3113IL-7)			
919.80MHz (ZP3113HK-7)			
921.42MHz (ZP3113BR-7)			
920.00MHz~923.00MHz (ZP3113TH-7)			
920.00MHz~923.00MHz (ZP3113KR-7)			
922.00MHz~926.00MHz (ZP3113JP-7)			
Operating Range: Up to 100 feet line of sight			
Operating Temp.: -10°C~ 40°C (5°F~104°F)			

DETECTING AREA: unit: meter

TOP VIEW   SIDE VIEW

Ø11.8M

Z-Wave Command Classes:

COMMAND_CLASS_APPLICATION_STATUS
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_BATTERY
COMMAND_CLASS_CONFIGURATION_V4
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V5
COMMAND_CLASS_INDICATOR_V3
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3
COMMAND_CLASS_NOTIFICATION_V8
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_SECURITY
COMMAND_CLASS_SECURITY_V2
COMMAND_CLASS_SENSOR_MULTILEVEL_V11
COMMAND_CLASS_SUPERVISION
COMMAND_CLASS_TRANSPORT_SERVICE_V2
COMMAND_CLASS_VERSION_V3
COMMAND_CLASS_WAKE_UP_V2
COMMAND_CLASS_ZWAVEPLUS_INFO_V2

Z-Wave S2 Support Command Class:

COMMAND_CLASS_APPLICATION_STATUS
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_BATTERY
COMMAND_CLASS_CONFIGURATION
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V5
COMMAND_CLASS_INDICATOR_V3
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3
COMMAND_CLASS_NOTIFICATION_V8
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_VERSION_V3
COMMAND_CLASS_WAKE_UP_V2

Configuration – Temperature

	Size	VALUE		Default
Parameter 1	1	°C	0x00	°C(0x00)
		°F	0x01	
Parameter 2	1	1~50 (Set up from 0.1°C~5°C)		3 (°C)

Configuration – Humidity

	Size	VALUE	Default
Parameter 3	1	1~50 (Set up from 1%~50%)	20%

Configuration – Light

	Size	VALUE	Default
Parameter 4	1	0,5~50 (Set up from 0 for Off or 5%~50%)	25%

Configuration – Motion Sensor:

	Size	Value
Parameter 5	1	1 ~ 127 (unsigned decimal) Minutes (default: 3 minutes)
Parameter 6	1	1 ~ 7 levels sensitivity, (default: 4)

(Parameter 5) Re-trigger duration: User can change value from 1 to 127 minutes to setup the re -trigger time when there is no movement detected in the period of time. Default is 3 minutes.
(Parameter 6) Infrared sensor sensitivity adjustment, 7 levels sensitivity, 1 = most sensitive, 7 = most insensitive, default values= 4

Configuration – LED Mode:

	Size	Value (Default: Mode 1)
Parameter 7	1	1 ~ 3 (Mode 1 ~ Mode 3) Mode 1 ➷ LED Turn Off (Both Temp/PIR Trigger) Mode 2 ➷ LED Quick Flash (Temp. / PIR Trigger) Mode 3 ➷ PIR Trigger (Quick Flash) Temp. Trigger (LED Off)

Configuration – Acknowledge:

	Size	Value
Parameter 8	1	0 ~ 10 (unsigned decimal) Times (default: 3 Times)

(Parameter 8) PIR Trigger Notification Re-sending Times: In order to prevent any gateway lost, user can change the value from 0 to 10 times to setup the notification re-sending times in case there is no ack from the gateway after sending the PIR Trigger Notification. Default is 3 Times..

Installation

Notice: If you are installing the entire Z-Wave ^{TM} system for the first time, please refer to the installation guide of Z-Wave ^{TM} Interface Controller before installing ZP3113.

1. Release cover tab to open the cover and insert CR123A Lithium battery into the battery compartment and close the cover back to sensor. The LED color will be Red / Blue / Green sequentially after power on.

2. Press the program switch once, the LED will flash 5 times which means the sensor has not been "included" yet or flash once which means the sensor has been "included" already.

3. **For "Inclusion"** in (adding to) a network: To add the ZP3113 to your Z-Wave network (inclusion), place your Z-Wave primary controller into inclusion mode. Press the Program Switch of ZP3113 once for sending the NIF. After sending NIF, Z-Wave will send the auto inclusion, otherwise, ZP3113 will go to sleep after 30 seconds. The LED indicator will be flashing while the inclusion is continued.

4. **For "Exclusion"** from (removing from) a network: To remove the ZP3113 from your Z-Wave network (exclusion), place your Z-Wave primary controller into "exclusion" mode, and following its instruction to delete the ZP3113 to your controller. Press the Program Switch of ZP3113 once to be excluded.

5. **Association**:
   * Support 2 groups (every group supports 5 nodes).
   * Group 1 = Lifeline (Battery, Reset Locally, Indicator, Notification)
   * Group 2 = ON/OFF Control (Basic Set)

6. **Wake Up Notification:**
   Press "Program SW" once to send NIF and LED will flash once, it takes around 10 seconds to send "Wake Up Notification" for receiving all command classes or go to sleep mode after 10 seconds without receiving any command.

7. **Auto Wake Up:**
   Use "Wake Up" command to set up the awaking time from 10 minutes to 194days (default: 24 hours and the increasing/decreasing interval is 200seconds) and send the wake up notification to controller.

8. **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 when power is lower than 2.4V +/- 0.1V

9. **Humidity Report**: Use SENSOR_MULTILEVEL_GET for getting the Humidity Report. If the present humidity is different with the sensor record and exceed the setting program, the sensor will report the present humidity.

Multilevel Sensor Report	
Sensor Type	0x05
Scale	0x00 (%)
Size and Precision	2

10. **Temperature**- Use SENSOR_MULTILEVEL_GET for getting the Temperature Report. If the present temperature is different with the sensor record and exceed the setting program, the sensor will report the present temperature. LED flashes in every 5 minutes to represent the temperature or wake up by press the Program SW.

Temperature	LED Color
Under 15°C	Green
15~23°C	Blue
23~28°C	Yellow/YellowGreen
28~36°C	Purple
Over 36°C	Red

Multilevel Sensor Report	
Sensor Type	0x01
Scale	0x00 (°C) 0x01 (°F)
Size and Precision	2

11. **Light Report**- There are 3 methods could activate the Light Report: a. Use SENSOR_MULTILEVEL_GET for getting the Light Report.
    b. If the present illumination is different with the sensor record and exceed the setting program, the sensor will report the present illumination.
    c. Every 10% decreasing from 100% will report automatically..

Multilevel Sensor Report	
Sensor Type	0x03
Scale	0x00 (%)
Size and Precision	2

Operation

1. Using adhesive tape to mount ZP3113 at 2 meters above surface. To enhance proper operation, place ZP3113 on the location which can detect the room widely. The PIR needs one minute to be stable after initial power on, please proceed motion detection after that.

2. Walk in front of ZP3113, sensor will send Basic set On (0xFF) and Notification Report please refer to status report as (Table 2) below.

3. If no movement detected in three minutes (default is 3 minutes - based on user's configuration setting, refer Parameter 5) will send Basic Set OFF (0x00) and Notification Report refer to status report as (Table 2) below.

4. The ZP3113 equipped with tamper switch. If the tamper switch is triggered (or remove the cover), the ZP3113 will send Notification Report refer to status report as (Table 2) below..

5. If the motion detection or tamper switch state change, LED will flash once (default is LED Turn Off - based on user's configuration setting, refer to Parameter 7) .

	Notification V8 (Movement)	Notification V4 (Tamper Switch)
Alarm Type	-	-
Alarm Level	-	-
Notification Type	0x07	0x07
Notification Event	0x08(Motion detect)/ 0x00(Motion detect clear)	0x03(remove cover)/ 0x00(cover closed)
Notification Event Parameter	0x08(Motion detect clear)	0x03(cover closed)

(Table 2)

6. Support OTA Firmware update from controller. Please refer to your controller manual. use COMMAND_CLASS_FIRMWARE_UPDATE_MD_V5. To proceed the OTA process. Once OTA function success, we recommend you exclusive the device & inclusive again before use the device after OTA.

7. ZP3113-7 is a Security Enabled Z-Wave Plus ^{TM} product, A Security Enabled Z-Wave controller must be used to fully utilize the product.

8. **Factory Default Reset:** Remove cover to trigged tamper switch, LED flash once & send out Alarm Report. Press Program Switch 10 times within 10 seconds, ZP3113 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 SECURITY S0, SECURITY S2 UNAUTHENTICATED & SECURITY S2 AUTHENTICATED.

10. Support SmartStart, please scan the QR Code from ZP3113 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. (P.S.: Z-Wave SmartStart aims to shift the tasks related to inclusion of an end device into a Z-Wave network away from the end device itself, and towards the more user-friendly interface of the gateway.)

11. The DSK label is on the backside of ZP3113US-7, Scan the DSK label to access the SmartStart if gateway 's UI supports SmartStart

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

13. All the reset commands depend on Z-Wave standard.