zipato®

MULTISENSOR QUAD

QUICK INSTALLATION GUIDE
v1.5

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→ ELECTROMAGNETIC COMPATIBILITY
In proper state and when operated properly, the product complies with all the requirements in respect of interference radiation according to EN 301 489-17, EN 301 489-1 and EN 300 328. The connections conducting HF signals must neither be manipulated nor damaged.

1.

→ TAKE CARE OF YOUR SAFETY
Display extreme caution when using ladders or steps, please follow manufacturer's instructions. Be careful when using hand and power tools and follow the manufacturer's guidelines when using them. Take care that the correct tools are used. Wear goggles or protective clothing where required.

INTRODUCTION

Presence detector, temperature meter, illuminance meter and door/window sensor in one device. Zipato Multisensor Quad offers elaborate security and ambient sensing options. Multifunctional nature of this product allows you to detect motion, monitor opened/closed status of any opening object, measure room's ambient temperature and light intensity.

When the detector is paired with security appliances, the (1) Door/window or (2) PIR sensor act as an alarm detector. Alternatively, when the detector is paired with Z-Wave controller, the detector can support home automation by detecting both changes in PIR motion detect, door/window open close status and lux levels, in percentage. Example scenario: During night, if illuminance levels are lower then preset value, any person movement in device's field of vision will trigger radio signal that will turn connected lightning equipment. In second example, you can combine door/window sensor and illumination sensor, and temperature sensor, so when person opens the door, lights will turn on, and heater/cooler will be activated to adjust room's temperature to comfortable levels.
This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.
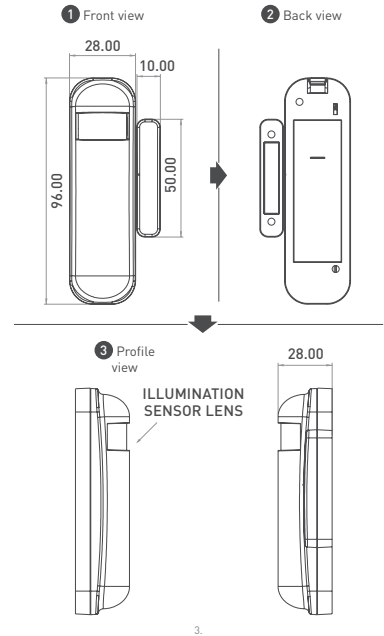
The device adopt the Z-Wave 500 series chip, which brings following advantages:

■ Concurrent multi-channel support reduces external interference.
■ Better RF range, improves about 10 meters in indoor.
■ Supports 100 Kbps transmission speeds.

2.

OVERVIEW

FIGURE 1
Dimensions (unit: mm)

❶ Front view   ❷ Back view

28.00
10.00
96.00
50.00

❸ Profile view   28.00

ILLUMINATION SENSOR LENS

3.

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❹ Top/bottom view

12.35

→ PACKAGE CONTENT

1PC	Micromodule Quad	1PC	Screws pack
1PC	Sticker pack	1PC	Quick Installation Guide

FEATURES

■ Door/Window, motion, temperature and illuminance sensor
■ It consists of two parts, magnet and a sensor
■ New Z-Wave 500 series chip supports multichannel operation and higher data rates (9.6/40/100kbps)
■ Higher output power enhances communication range(+5dBm output power as compared to -2.5dBm 300 series)
■ Can be used with various Z-Wave networks/controllers
■ Low battery battery indication
■ Door/Window status and battery status auto-report
■ LED indicator
■ Over-the-air firmware update
■ Tamper proof protection

SPECIFICATION

→ TECHNICAL SPECIFICATION

Protocol	Z-Wave Plus
Power	CR123A lithium battery, 1400mAh
Operating voltage	3V
Operating current	45 mA
Low battery voltage	2.6 V
Operating temperature	-10°C ~ 40°C
Temperature detect range	0°C ~ 40°C
Temperature detect accuracy	±0.5OC
Range	Minimum 30m indoor / 100m outdoor
Illumination range	0 - 100%

4.

|	
PIR detection range	7m
PIR detection angle	90 Deg.
Weight	49g
Dimensions	Sensor 28x95x23mm; Magnet 12x47x9 mm
Package weight	68g
Package dimensions	68x21x136 mm
Battery	1500mAh
Magnetic gap	20 mm
Warranty	1 year

→ MODELS AND FREQUENCIES

Australia	ph-psm02.au / 919.80 MHz , 921.40MHz
European Union	ph-psm02.eu / 868.40 MHz, 869.85 MHz
India	ph-psm02.in / 865.20MHz
Israel	ph-psm02.is / 916.00 MHz
Russia	ph-psm02.ru / 869.00 MHz
United States	ph-psm02.us / 908.40 MHz, 916.00 MHz

BATTERY INSTALLATION

When the device reports the low battery message. The user should replace the battery.
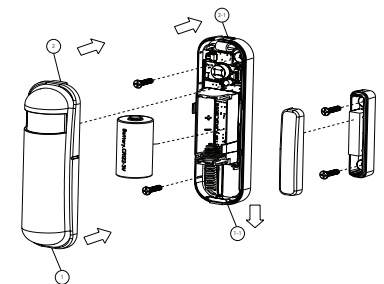To open the front cover please follow below steps.
■ Using a tool (1) to press 1-1 till you hear a click sound
■ Hold the front cover and pull back
■ Hold the front cover and pull up

5.
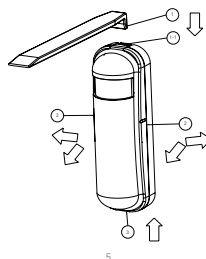
Replace the new battery and install the cover back.
1. Put the front cover bottom to 1-1, and press down.
2. Push the front cover top to 2-1.

POWER UP PROCEDURE

→ BATTERY POWER CHECK
When it powers up, the device will detect the power level of the battery immediately. If the power level is too low, the LED will continue to flash for about 5 seconds. In that case, replace the battery.

→ PIR WARM UP
When it powers up, the PIR need to warm up before operation. The warm up time about 1 minute, the LED will flash every 2 seconds. After completing the procedure the LED will light ON three times

→ NWI
When it powers up, the device will check iif it is already added to the network. If it isn't, it will automatically start the NWI mode. The LED will flash in every second and continue for about 30 seconds, until timeout or successful inclusion by controller. You can press the tamper key 3 times to abort the NWI mode.

6.

→ WAKE
When it powers up, the device will be in wake state for about 20 seconds. During this period, the controller can communicate with the device. Normally the device is always sleeping to save the battery energy.

→ FUNCTION DIP SWITCH
There is a function DIP switch in front of the device. Remove the front cover at the right top of the PCB, and also has mark "M1" and "M2" for two switches.

| M1	M2	Description
ON	ON	Test Mode and OTA mode.
ON	OFF	Normal Mode.
OFF	ON	Normal Mode.
OFF	OFF	Customer Mode. According to the configuration setting NO. 5 to set the operation mode.

INSTALLATION

■ First you have to add device to the Z-Wave network. First, make sure the primary controller is in inclusion mode. Power on the device, after removing the insulation Mylar on the back side of the device. The device will auto start the NWI (Network Wide Inclusion) mode. It should be included in 5 seconds. You will see the LED light ON one second.

■ Let Controller associate with Group 1 of the device, any light switch that should be turned on when the device is triggered should be associated with Group 2 of the device.

■ In the package there are two type of double coated tape, one is thicker (hereinafter referred to as A tape) and another is thinner (hereinafter referred to as B tape), you can use A tape for the test at the beginning. The right way for A tape installation is to stick it below the tamper key. The thicker tape won't let the tamper key close, so the sensor will enter the test mode, You may test if installed position is good or not by this way.

7.

Testing Sponge

Back view
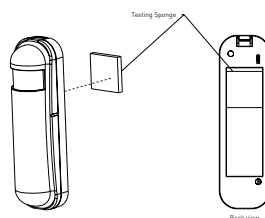
After finishing the test and deciding right position you can remove tape A, and mount the sensor by using tape B. This will close the tamper key and let the sensor enter normal mode.
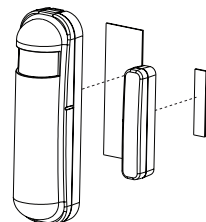
CHOOSING A SUITABLE LOCATION

■ The recommended mounting height is 160cm
■ Don't let the device face the window or the sunlight.
■ Don't let the device face the source of heat. For instance the heater or the air-condition.

APPLICATION

Multisensor Quad is a special device combining both PIR and

8.

Door/window functions. The benefits of combining Door/window with PIR in one sensor can be observed in the following scenarios:

A The ambient lighting would be lower than default setting value after sunset. If the Multisensor Quad was installed on the inner side of door in the house, Multisensor Quad would detect coming in people, then the light would be turned on for the better illumination by radio transmission. Furthermore, Multisensor Quad can be applied in a bathroom and it may turn on/off light and fan automatically.

B Multisensor Quad can be taken as a portal chime at front desk of hotel or restaurant by sending out signal to IP-Gateway PSC01 as reminder which can be connected with speaker to turn the volume up. It can be kept silent when customer leaving.

C For SMEs (Small and medium enterprises), Multisensor Quad plays an important role in working hours and non-working hours. When non-working hours, Multisensor Quad plays as security motion sensor, protects the office from intruders. At working hours, 4 in 1 sensor, can be applied to curtain or heater/cooler controller for energy saving issue; although some people may use thermostat to control heater/cooler however, Multisensor Quad sensor can be smarter choice. Since it can detect the people's, activities, and shutdown machine when no one exists or no movements.

D In the past, a digital home starter KIT includes many different sensors with very high price. Right now, Using the 4 in 1 patented sensor and a 4 in 1 gateway PSC01 (Siren + speaker + light + IP based controller) carry out home "security" + "safety" + "automation" in one box and provide customer full experience of digital life and flexibility in installation with affordable price.

SECURITY NETWORK

This device supports the security function. When the device is included with a security controller, the device will auto switch to the security mode. In the security mode, the following commands need to be wrapped in Security Command Classes to communicate, otherwise there will be no response.

9.

COMMAND_CLASS_BATTERY
COMMAND_CLASS_NOTIFICATION_V4
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_CONFIGURATION
COMMAND_CLASS_SENSOR_BINARY_V2
COMMAND_CLASS_SENSOR_MULTILEVEL_V5
COMMAND_CLASS_WAKE_UP_V2

OPERATION MODE

There are two modes "Test" and "Normal". "Test Mode" is meant to test the sensor function during installation. "Normal Mode" is for the normal operation. When the event is triggered, normally the LED will be turned off, unless the battery is at the low level, in which case LED will flash once. But in the "Test Mode" the LED will light ON one second. When the event triggered, the device will report the messages to the nodes in the group 1. The messages also include the battery level, the temperature and the illumination level. The user can switch the report by setting the configuration NO. 5 bit4 (illumination) and bit5 (temperature), and the configuration NO. 7 bit6 (battery). When the event is triggered, if the environment luminance is less than the setting of the value of the configuration NO. 4, the device will emit the signal to turn ON the lighting equipment, those nodes are in the group 2. And delay a while to turn OFF the lighting equipment. The delay time is set by the configuration NO. 9. The PIR motion re-detection interval, in the "Test Mode" is fixed to 6 seconds. In the "Normal Mode", its duration is set in the configuration NO. 8.

Notice: When the tamper key of the back side is released, the device always in the "Test Mode", no matter the DIP switch setting.

ADDING TO Z-WAVE NETWORK

There are two tamper keys in the device, one is in the back side, another is in the front side. They have the same function. Both of them can inclusion, exclusion, reset or association from Z-Wave network. In the begginning, you have to join the device to the Z-Wave network. First, make sure the primary controller is in the inclusion mode. And then power on the device, after taking out the insulation Mylar on the back side of the device.

The device will auto start the NWI (Network Wide Inclusion) mode. And it should be included in 5 seconds. You will see the LED light ON for second.

→ INCLUSION:
- Put the Z-Wave Controller in inclusion mode.
- Pressing tamper key three times within 1.5 seconds will enter inclusion mode.
- After succesfull inclusion, the device will wake to receive the setting command from Z-Wave Controller in about 20 seconds.

→ EXCLUSION:
- Put the Z-Wave Controller in exclusion mode.
- Pressing tamper key three times within 1.5 seconds will enter exclusion mode. Node ID has been excluded.

→ RESET:
- Use this procedure only in the event that the primary controller is lost or otherwise inoperable.
- Pressing tamper key four times within 1.5 seconds and dduring 4th press, hold the tamper key until LED lights up.
- After 3 seconds the LED will turn OFF, and after next 2 seconds, release the tamper key. If successful, the LED will light ON for one second. Otherwise, the LED will flash once.
- 3. IDs are excluded and all settings will reset to factory default.

→ ASSOCIATION:
- Have Z-Wave Controller enter association mode.
- Pressing tamper key three times within 1.5 seconds will enter association mode.
  Note: The device support 2 groups. The group 1 is for receiving the report message, like triggered event, temperature, illumination etc. The group 2 is for light control, the device will send the "Basic Set" command to this group. And each group support 8 nodes maximum.

Including a node ID allocated by Z-Wave Controller means inclusion. Excluding a node ID allocated by Z-Wave Controller means exclusion. Failed or success in including/excluding the node ID can be viewed from Z-Wave Controller.

Notice: Always Reset a Z-Wave device before trying to add it to a Z-Wave network.
Notice: When the device is into NWI mode, the sensor functionality will useless. The NWI mode will timeout after 30

seconds. You can press the tamper key 3 times to abort the NWI mode.

Z-WAVE NOTIFICATION

After the device adding to the network, it will wake-up once per day in default. When it wakes up it will broadcast the "Wake Up Notification" message to the network, and wake-up 10 seconds for receive the setting commands.
The wake-up interval minimum setting is 30 minutes, and maximum setting is 120 hours. And the interval step is 30 minutes. If the user want to wake-up the device immediately, please remove the front cover, and press the tamper key once. The device will wake-up 10 seconds.

Z-WAVE MESSAGE REPORT

When the PIR motion triggered or the door/windows triggered, the device will report the trigger event and also report the battery status, temperature and illumination level. In default the device will be using Notification Report to represent the trigger event, it can be changed to Sensor Binary Report by setting the configuration NO. 7 Bit4 to 1.

→ MOTION REPORT
When the PIR motion detected, the device will unsolicited to send the report to the nodes in the group 1.

Notification Report (V4)
Notification Type: Home Security (0x07) Event: Motion Detection, Unknown Location (0x08)

Notification Report (V4)
Notification Type: Home Security (0x07) Event: Motion Detection, Unknown Location (0x08)

→ DOOR/WINDOW REPORT
When the Door/Window state changed, the device will unsolicited to send the report to the nodes in the group 1.

Notification Report (V4)

Notification Type: Access Control (0x06) Event: Door/Window is open (0x16)   Door/Window is open (0x16)
Sensor Binary Report (V2)
Sensor Type: Door/Window (0x0A) Sensor Value: 0x00 is closed, 0xFF is opened.

→ TAMPER REPORT
When the 2 tamper keys in the device are pressed for over 5 seconds, the device will fall into the alarm state. In that state, if any one of the tamper keys is released, the device will send unsolicited test reports to the nodes in the group 1.

Notification Report (V4)
Notification Type: Home Security (0x07) Event: Tampering. Product covering removed (0x03)
Sensor Binary Report (V2)
Sensor Type: Tamper (0x08) Sensor Value: 0xFF

→ TEMPERATURE REPORT
When the PIR motion detected or the door/window state changed, the device will unsolicitedly send the "Sensor Multilevel Report" to the nodes in the group 1.
Sensor Type: Temperature (0x01)

Note: To disable this functionality set the configuration setting N0.5, the bit5 of the value to 1.

■ **Temperature differential report**
This function is enabled by default, to disable this function set the configuration NO.21 to 0.

By default, when the temperature is changed plus/minus one degree Fahrenheit (0.56 degree Celsius), the device will report temperature information to the nodes in the group 1.
The device will measure the temperature in every minute. And if the temperature is over 140 degree Fahrenheit (60 degree Celsius), the
device will always report each measurement.

Caution 1: Enabling this functionality will cause the PIR Motion to disable detection when it measuress the temperature. In other words, The PIR motion will be blind second per every minute.

→ ILLUMINATION REPORT
When the PIR motion detected or the door/window state changed, the device will unsolicitedly send the "Sensor Multilevel Report" to the nodes in the group 1.

Sensor Type: Luminance (0x03)
Note: To disable this functionality set the the configuration setting N0.5, the bit4 of the value to 1.

■ **Illumination differential report**
This function is disabled by default, to enable this function set the configuration NO.22 to value other than zero. When this functionality is enabled, the device will measure the illumination in every minute. If the illumination is changed to plus or minus the value (setting by the configuration NO.22), the device will report illumination information to the nodes in the group 1.

Caution 1: Enabling this function will reduce the battery life about 15%
~ 20%. Additionally, if you set the differential value too small, it will increase reporting frequency, which will shorten the battery life more. We reccommend that differential value should not be smaller than 10. value should not small than 10.
Caution 2: If the configuration No.4 is setting to 0 or 100, this functionality is useless.
Caution 3: Enabling this functionality will cause the PIR Motion to disable detection during the illumination measurement. In other words, the PIR motion will go blind per one second in every minute.

→ TIMING REPORT
Beside the event triggered could report message, the device also supports the timing of unsolicited status reporting.
- Battery level report: Every 6 hours report once in default. It could be changed by configuration setting NO. 10.
- Low battery report: When the battery level is too low, every 30 minutes report will be sent once.
- Door/window state report: Every 6 hours report is sent once by default. It can be changed in configuration setting NO. 11.
- Illumination level report: Every 6 hours report will be sent

once by default. It can be changed in configuration setting NO. 12.
- Temperature report: Every 6 hours report once in default. It could be changed by configuration setting NO. 13.

Notice: The configuration NO. 10, 11, 12 and 13 can be set to zero to disable the auto report. Configuration NO. 20 can change the tick interval, the default value is 30, if setting to 1, that means the minimum auto report interval will be one minute. And please notice if setting this value to zero, that means disable all of the timing report except the low battery detection.

Z-WAVE CONFIGURATION SETTINGS

Notice:
- For all of the configuration, the data size is 1.
- The configuration marked with star(*), means that after the removal of device, setting will still keep, without reverting back to factory default settings. Unless the user execute the "RESET" procedure.
- The reserve bit or not supported bit is allowed any value, but no effect.

NO.
2
Name
Basic Set Level
Def.
0xFF
Valid Values
All
Description
Setting the BASIC command value to turn on the light. The 0xFF(-1) means turn on the light. For dimmer equipment 1 to 100 means the light strength.

NO.
3 (*)

Name
PIR Sensitivity
Def.
80
Valid Values
0~99
Description
PIR sensitivity settings. 0 means disable the PIR motion. 1 means the lowest sensitivity, 99 means the highest sensitivity. High sensitivity means can detected long distance, but if there is more noise signal in the environment, it will re-trigger too frequency.

NO.
4
Name
Light Threshold
Def.
99
Valid Values
0~100
Description
Setting the illumination threshold to turn on the light. When the event triggered and the environment illumination lower then the threshold, the device will turn on the light. 0 means turn off illumination detected function. And never turn on the light. 1 means darkest. 99 means brightest. 100 means turn off illumination detected function. And always turn on the light. **Notice:** In none test mode, only the value in 1 to 99 will enable the illumination detected function and update the illumination value.

NO.
5
Name
Operation Mode
Def.

0
Valid Values
All
Description
Operation mode. Using bit to control. Bit0: Reserve. Bit1: 1 means test mode, 0 means normal mode. **Notice:** This bit only effect by the DIP Switch setting to "customer mode", otherwise it decides by DIP Switch setting to Test or Normal Mode. Bit2: Disable the door/window function. (1:Disable, 0:Enable) Bit3: Setting the temperature scale. 0: Fahrenheit, 1:Celsius Bit4: Disable the illumination report after event triggered. (1:Disable, 0:Enable) Bit5: Disable the temperature report after event triggered. (1:Disable, 0:Enable) Bit6: Reserve. Bit7: Disable the back key release into test mode. (1:Disable, 0:Enable)

NO.
6 (*)
Name
Multi-Sensor Function Switch
Def.
4
Valid Values
All
Description
Multisensor function switch. Using bit to control.
Def.
0
Valid Values
All
Description

Bit0: Disable magnetic integrate illumination to turn ON the lighting nodes in the association group 2. (1:Disable, 0:Enable) Bit1: Disable PIR integrate Illumination to turn ON the lighting nodes in the association group 2. (1:Disable, 0:Enable)
Def.
1
Valid Values
All
Description
Bit2: Disable magnetic integrate PIR to turn ON the lighting nodes in the association group 2. (1:Disable, 0:Enable) (Default is Disable)
Def.
0
Valid Values
All
Description
Bit3: When Bit2 is 0 (Enable), Are the device and the lighting in the same room? 0: In the same room (Default), 1: In the different room. Notice: If this bit is 1, it is recommended also set the Bit1 to 1, cause the PIR triggered, doesn't mean the people in that room. Bit4: Disable delay 5 seconds to turn off the light, when door/window closed. (1:Disable, 0:Enable) Bit5: Disable auto turn off the light, after door/window opened to turn on the light. (1:Disable, 0:Enable) Notice: If bit2 is zero, this setting is useless. Notice: If the configuration No.9 is zero, this setting is useless.

NO.
7 (*)
Name
Customer Function
Def.
4
Valid Values

All	
Description	Customer function switch, using bit control.
Def.	0
Valid Values	All
Description	Bit1: Enable sending motion OFF report. (0:Disable, 1:Enable) Note: Depends on the Bit4, 0: Report Notification CC, Type: 0x07, Event: 0xFE 1: Sensor Binary Report, Type: 0x0C, Value: 0x00
Def.	1
Valid Values	All
Description	Bit2: Enable PIR super sensitivity mode. (0:Disable, 1:Enable)
Def.	0
Valid Values	All
Description	Bit3: Disable send out BASIC OFF after door closed. (1:Disable, 0:Enable) Bit4: Notification Type, 0: Using Notification Report. 1: Using Sensor Binary Report. Bit5: Disable Multi CC in auto report. (1:Disable, 0:Enable) Bit6: Disable to report battery state when the device triggered. (1:Disable, 0:Enable)
NO.	8
Name	PIR Re-Detect Interval Time

Def.	3
Valid Values	1~127
Description	In the normal mode, after the PIR motion detected, setting the re-detect time. 8 seconds per tick, default tick is 3 (24 seconds). Setting the suitable value to prevent received the trigger signal too frequently. Also can save the battery energy. Notice: If this value bigger than the configuration setting NO. 9. There is a period after the light turned off and the PIR not start detecting.
NO.	9
Name	Turn Off Light Time
Def.	4
Valid Values	0~127
Description	After turn on the lighting, setting the delay time to turn off the lighting when the PIR motion is not detected. 8 seconds per tick, default tick is 4 (32 seconds). 0 means never send turn off light command.
NO.	10
Name	Auto Report Battery Time
Def.	12
Valid Values	

	0~127
Description	The interval time for auto report the battery level. 0 means turn off auto report battery. The default value is 12. The tick time can setting by the configuration No.20.
NO.	11
Name	Auto Report Door/Window State Time
Def.	12
Valid Values	1~127
Description	The interval time for auto report the door/window state. 0 means turn off auto report door/window state. The default value is 12. The tick time can setting by the configuration No.20.
NO.	12
Name	Auto Report Illumination Time
Def.	12
Valid Values	1~127
Description	The interval time for auto report the illumination. 0 means turn off auto report illumination. The default value is 12. The tick time can setting by the configuration No.20.

NO.	13
Name	Auto Report Temperature Time
Def.	12
Valid Values	0 ~ 0xFF
Description	The interval time for auto report the temperature. 0 means turn off auto report temperature. The default value is 12. The tick time can setting by the configuration No.20.
NO.	20
Name	Auto Report Tick Interval
Def.	30
Valid Values	0 ~ 0xFF
Description	The interval time for auto report each tick. Setting this configuration will effect configuration No.10, No.11, No.12 and No.13. Caution: Setting to 0 means turn off all auto report function.
NO.	21
Name	Temperature Differential Report
Def.	1

Valid Values	0 ~ 0x7F
Description	The temperature differential to report. 0 means turn off this function. The unit is Fahrenheit. Enable this function the device will detect every minutes. And when the temperature is over 140 degree Fahrenheit, it will continue report. Enable this functionality will cause some issue please see the detail in the "Temperature Report" section.
NO.	22
Name	Illumination Differential Report
Def.	0
Valid Values	0 ~ 0x63
Description	The illumination differential to report. 0 means turn off this function. The unit is percentage. Enable this function the device will detect every minutes. Enable this functionality will cause some issue please see the detail in the "Illumination Report" section.

Z-WAVE COMMAND CLASSES

COMMAND_CLASS_CONFIGURATION
COMMAND_CLASS_VERSION
COMMAND_CLASS_SENSOR_BINARY_V2
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_WAKE_UP_V2
COMMAND_CLASS_SENSOR_MULTILEVEL_V5
COMMAND_CLASS_BATTERY
COMMAND_CLASS_BASIC

OVER THE AIR FIRMWARE UPDATE

The device supports the Z-Wave firmware update via OTA. Before starting the procedure, please remove the front cover of the device. Otherwise the hardware check will fail. Let the controller into the firmware update mode, and then press the front tamper key once to start the update. After completing the firmware download, LED will start flashing every 0.5 second. During this time, please don't remove the battery, otherwise it will cause the firmware failure, and the device will stop functioning. After LED stops flashing, it is recommended that user powers up the device. Caution: After battery removal, please wait about 30 seconds, and then re-install the battery.

TROUBLESHOOTING

Having trouble installing your new product?
Zipato's website contains the latest user documentation and software updates for Zipato products and services:
www.zipato.com
———
You can also find answers in the Zipato Community at:
community.zipato.com
———
Zipato Support: **support@zipato.com**

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The Limited Product Warranty set forth below is given by Tri plus grupa d.o.o. (Europe) (herein referred to as "ZIPATO"). This Limited Product Warranty is only effective upon presentation of the proof of purchase. Upon further request by ZIPATO, this warranty card has to be presented, too.

EXCEPT AS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY, ZIPATO MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ZIPATO EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED IN THIS LIMITED WARRANTY. ANY IMPLIED

WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED IN DURATION TO THE LIMITED WARRANTY PERIOD. TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES AGAINST ZIPATO. THEY DO NOT, HOWEVER, AFFECT OR RESTRICT THE RIGHTS YOU HAVE AGAINST THE BUSINESS YOU BOUGHT A ZIPATO PRODUCT FROM. IN NO EVENT WILL ZIPATO BE LIABLE FOR LOSS OF DATA OR FOR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. HOWEVER, NOTHING IN THIS AGREEMENT LIMITS ZIPATO'S LIABILITY TO YOU (I) IN THE EVENT OF DEATH OR PERSONAL INJURY TO THE EXTENT RESULTING FROM ZIPATO'S NEGLIGENCE, OR (II) TO THE EXTENT RESULTING FROM ANY FRAUDULENT MISREPRESENTATION ON THE PART OF ZIPATO, OR (III) TO THE EXTENT ARISING UNDER PART 1 OF THE CONSUMER PROTECTION ACT 1987 OF THE UNITED KINGDOM. SOME STATES OR COUNTRIES DO NOT ALLOW: (1) A DISCLAIMER OF IMPLIED WARRANTIES; (2) A LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION; OR (3) LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS. IN SUCH STATES OR COUNTRIES, SOME EXCLUSIONS OR LIMITATIONS OF THIS LIMITED WARRANTY MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS THAT MAY VARY FROM STATE TO STATE OR FROM COUNTRY TO COUNTRY. YOU ARE ADVISED TO CONSULT APPLICABLE STATE OR COUNTRY LAWS FOR A FULL DETERMINATION OF YOUR RIGHTS.

This Limited Product Warranty applies to ZIPATO branded hardware products (collectively referred to as "ZIPATO Hardware Products") sold by ZIPATO (Europe), its European subsidiaries, affiliates, authorized resellers, or country distributors (collectively referred to as "ZIPATO Resellers") with this Limited Product Warranty.

The term "ZIPATO Hardware Product" is limited to the hardware components and all its internal components including firmware.

The term "ZIPATO Hardware Product" DOES NOT include any software applications or programs.

⊖ GEOGRAPHICAL SCOPE OF THE LIMITED PRODUCT WARRANTY
This Limited Product Warranty is applicable to Hardware Products sold by Zipato Resellers in all countries listed at the beginning of this document under the heading "Countries in which this ZIPATO Limited Product Warranty applies". The Limited Product Warranty will be honored in any country where ZIPATO or its authorized service providers offer warranty service subject to the terms and conditions set forth in this Limited Product Warranty. However, warranty service availability and response times may vary from country to country and may also be subject to registration requirements.
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⊖ LIMITATION OF PRODUCT WARRANTY
ZIPATO warrants that the products described below under normal use are free from material defects in materials and workmanship during the Limited Product Warranty Period set forth below ("Limited Product Warranty Period"), if the product is used and serviced in accordance with the user manual and other documentation provided to the purchaser at the time of purchase (or as amended from time to time).

ZIPATO does not warrant that the products will operate uninterrupted or error-free or that all deficiencies, errors, defects or non-conformities will be corrected.

This warranty shall not apply to problems resulting from: (a) unauthorized alterations or attachments; (b) negligence, abuse or misuse, including failure to operate the product in accordance with specifications or interface requirements; (c) improper handling; (d) failure of goods or services not obtained from ZIPATO or not subject to a then-effective ZIPATO warranty or maintenance agreement; (e) improper use or storage; or (f) fire, water, acts of God or other catastrophic events. This warranty shall also not apply to any particular product if any ZIPATO serial number has been removed or defaced in any way. ZIPATO IS NOT RESPONSIBLE FOR DAMAGE THAT OCCURS AS A RESULT OF YOUR FAILURE TO FOLLOW THE INSTRUCTIONS FOR THE ZIPATO HARDWARE PRODUCT.

⊖ LIMITED PRODUCT WARRANTY PERIOD
The Limited Product Warranty Period starts on the date of purchase from ZIPATO. Your dated sales or delivery receipt, showing the date of purchase of the product, is your proof of the

purchase date. You may be required to provide proof of purchase as a condition of receiving warranty service. You are entitled to warranty service according to the terms and conditions of this document if a repair to your ZIPATO branded hardware is required within the Limited Product Warranty Period.

(Other than in respect of products for domestic use (in particular those listed in the first and last boxes in the table below), this Limited Product Warranty extends only to the original end user purchaser of this ZIPATO Hardware Product and is not transferable to anyone who obtains ownership of the ZIPATO Hardware Product from the original end-user purchaser.

⊖ PRODUCT WARRANTY PERIOD TABLE

PRODUCT TYPE	Multisensor Quad
PRODUCT WARRANTY PERIOD	One (1) year

IMPORTANT
The content of "Product Type" listed above is subject to change; please refer to the **www.zipato.com** for latest update.

⊖ PERFORMANCE OF THE LIMITED PRODUCT WARRANTY
If a product defect occurs, ZIPATO's sole obligation shall be to repair or replace any defective Zipato Hardware Product free of charge provided it is returned to an Authorized ZIPATO Service Centre during the Limited Warranty Period. Such repair or replacement will be rendered by ZIPATO at an Authorized ZIPATO Service Centre. All component parts or hardware products that are replaced under this Limited Product Warranty become the property of ZIPATO. The replacement part or product takes on the remaining Limited Warranty Period of the replaced part or product. The replacement product need not be new or of an identical make, model or part; ZIPATO may in its discretion replace the defective product (or any part thereof) with any reconditioned equivalent (or superior) product in all material respects to the defective product.

WARRANTOR

Tri plus grupa d.o.o.
Banjavciceva 11
10 000 Zagreb
CROATIA

TEL +385 (0)1 4004 404
FAX +385 (0)1 4004 405

DECLARATION OF CONFORMITY

CE

The manufacturer Tri plus grupa d.o.o declares under our sole responsibility that the product:

Marketing model: Multisensor Quad
Regulatory model: ph-psm02
Trade/Brand name: Zipato

is in conformity with the Low Voltage Directive 2006/95/EC, EMC Directive 2004/108/EC, R&TTE Directive 1995/5/EC and carries the CE marking accordingly.
The following harmonized standards were applied:

R&TTE (1995/5/EC)
EN 300 220-1: V2.4.1
EN 300 220-2: V2.4.1

EMC (2004/108/EC)
EN 301 489-1: V1.9.2
EN 301 489-3: V1.6.1

LVD (2006/95/EC)
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011

Changes or modifications not expressly approved by Tri plus grupa d.o.o. for compliance could void the user's authority to operate the equipment.

FC

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.

NOTE: Changes or modifications not expressly approved by Zipato for compliance could void the user's authority to operate the equipment. 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.

DISPOSING AND RECYCLING YOUR PRODUCT
When it reaches end of life, dispose of the product according to your local enviromental laws, guidelines and regulations.

This symbol on the product or packaging means that according to local laws and regulations needs to be disposed of separately from household waste. Once this product has reached the end

of its life, please take it to a collection point (recycle facilites) designated by your local authorities, some will accept your product for free or simply drop it off at your Zipato re-seller store. By recycling the product and its packaging in this manner you help to conserve the environment and protect human health. At Zipato, we understand and are committed to reducing any impact our operations and products may have on the environment. To minimize this impact Zipato designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in both products and packaging.

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