

SMOKE SENSOR

QUICK INSTALLATION GUIDE v1.0

⊖TRADEMARKS

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\bigcirc NOTICE

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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 301 489-3 and EN 300 328. The connections conducting HF signals must neither be manipulated nor damaged.

→ 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

Zipato Smoke Sensor (Z-Wave) is designed to give early warning of developing fires by giving off the alarm sounds from its build-in alarm horn, based on Z-Wave technology. Zipato Smoke Sensor is Z-Wave Plus product, it supports security, OTA and all other new features of 500 Series Z-Wave chipset.

Z-Wave is a wireless communication protocol designed for remote control of appliances in residential automated homes and light commercial enviroments.It can be used with lighting systems, home access control, entertainment systems and house appliances.

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 is based on Z-Wave 500 series chip, and has advantages as below:

Concurrent multi-channel support reduces external interference.

Better RF range, about 10 meters improvement indoors.
Supports 100 Kbps transmission speeds.

OVERVIEW



→ PACKAGE CONTENT



FEATURES

Smoke detection

- New Z-Wave 500 series chip brings better RF range indoors and up to 100 Kbps transmission speeds
- Higher output power to enhance the communication range (+5dBm output power as compared to -2.5dBm 300 series)
- Built-in sound alarm
 Over-the-air firmware update
- Low battery auto report
- Low power consumption
- Low power indication
- Easy installation and rellocation
- Removable ceiling bracket
- Slim, elegant design

SPECIFICATION

→ TECHNICAL SPECIFICATION

PROTOCOL	Z-Wave 500 series
POWER	CR123A lithium battery, 1400mAh
OPERATING VOLTAGE	3V
OPERATING CURRENT	90 mA
STANDBY CURRENT	20 uA
RANGE Minimum	30m indoor, 70m outdoor line of sight
OPERATING TEMPERATURE	0 ° C ~ 40 ° C
DIMENSION	120 x 120 x 14 mm
WEIGHT	150g
USE	Indoor use only
WARRANTY	1 year

→ MODEL AND FREQUENCIES

MUDELANDFREQUENCIES	
EUROPEAN UNION - EU version	ph-psg01.eu / 868.42MHz
UNITED STATES - US version	ph-psg01.us / 908.42MHz
RUSSIA - RU version	ph-psg01.ru / 869.00MHz
ISRAEL - IS version	ph-psg01.is / 916.00MHz
AUSTRALIA - AU version	ph-psg01.au / 921.42MHz
INDIA - IN version	ph-psg01.in / 865.22MHz
JAPAN - JP	922~926 MHZ

INSTALLATION & OPERATION

\bigcirc BATTERY INSTALLATION

If your controller receives low battery alarm, it means that Smoke Sensor's battery is weak. When the device report the low battery message user should replace the battery. The battery type is CR123A, 3.0V.

To open the front cover please follow below steps: 1 | Open battery compartment.

- 2 | Install battery into compartment and make sure the "+" and "-"ends of each battery are aligned properly.
- 3 After battery is installed in compartment, you will hear a chirp which indicates the device is receiving battery power.



⊖ CHOOSING A SUITABLE LOCATION

For complete coverage in residential units, Smoke Sensors should be installed in all rooms, halls, storage areas, basements and attics in each family living unit. Minimum coverage is one sensor on each floor and one in each sleeping area.

- Install Smoke Sensor as close to the center of ceiling as possible. If this is not practical, put the sensor on the ceiling, no closer than 4 inches (10 cm) from any wall or corner.
- 2 | If ceiling mounting is not possible, put wall-mounted sensors between 4 and 6 inches (10~15 cm) from the ceiling.
- 3 | If some of your rooms have sloped, peaked, or gabled ceilings, try to mount sensors 3 feet (0.9 meter). Measure horizontally from the highest point of ceiling.



• Smoke sensors for maximum security

Bedroom O	Kitchen	Bedroom O	Bedroom O
	Living C	room)	O Bedroom
		D	
0			
Bedroom	O Smoke sensors for minimum security		

Nuisance alarms take place when Smoke Sensors are installed where they will no longer work properly. To avoid nuisance alarms, do not install Smoke Sensors in the following situations:

- Combustion particles are by-products of something that is burning. Thus, don't install Smoke Sensors in or near areas where combustion particles are present to avoid nuisance alarms, such as kitchens with few windows or poor ventilation, garages where there may be vehicle exhaust, near furnaces, hot water heaters, and space heaters.
- Do not install Smoke Sensors less than 20 feet (6 meters) away from places where combustion particles are normally present, like kitchens.

If a 20-foot distance is not possible, e.g. in a mobile home, try to install the alarm as far away from the combustion particles as

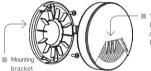
possible, preferably on the wall. To prevent nuisance alarm alarms, provide good ventilation in such places.

In very dusty or dirty areas, dirt and dust can build up on the alarm's sensing chamber, possibly making it overly sensitive. Additionally, dust or dirt can block openings to the sensing chamber and possibly lowering alarm's sensing efficiency.

Near fluorescent lights, electrical "noise" from fluorescent lights may cause nuisance alarms. Install Smoke Sensor at least 5 feet [1.5 meters] from such lights.

⊖MOUNTING

- 1 | At the place where you are going to install your Smoke Sensor, draw a horizontal line six inches long.
- Remove the mounting bracket from your device by rotating it counterclockwise.
- 3 | Place the bracket so that the two lon-gest hold slots are aligned on the line. In each of keyhole slots, draw a mark to locate a mounting plug and do the screwing.
- 4 | Remove the bracket.
- 5 | Drill two holes at the marks and insert plastic wall plugs. Put the Smoke Sensor away from plastic dust.
- 6 | Attach the bracket to the wall. Line up the slots of the bracket and the Smoke Sensor. Push the sensor onto the mounting bracket and turn it clockwise to fix it into the place. Pull onward on the Smoke Sensor to make sure it is securely attached to the mounting bracket.



Test / Silence Button & Power / Smoke Alarm LED indicator

ADDING TO Z-WAVE NETWORK

For the first time, you must join the device to Z-Wave network. First, make sure the primary controller is in the adding/inclusion mode. And then power on the device, and then insert battery to power on the device. Press the test button once to start the NWI (Network Wide Inclusion) mode, and it should be included in 5 seconds.

Notice: Including a node ID allocated by Z-Wave Controller means "Add" or "Inclusion". Excluding a node ID allocated by Z-Wave Controller means "Remove" or "Exclusion". Notice: Including a node ID allocated by Z-Wave Controller means "Add" or "Inclusion". Excluding a node ID allocated by Z-Wave Controller means "Remove" or "Exclusion".

FUNCTION	DESCRIPTION
Add	 Have Z-Wave Controller entered inclusion mode. Press test button three times within 1.5 seconds to enter the inclusion mode. After the adding was successful, the device will wake to receive the setting mand from Z-Wave Controller about 20 seconds.
Remove	 Have Z-Wave Controller entered inclusion mode. Pressing test button three times within 1.5 seconds to enter the exclusion mode. Node ID has been removed.
Reset	Notice: Use this procedure only in the event that the primary controller is lost or otherwise inoperable. 1. Have Z-Wave Controller entered inclusion mode. 2. After the red LED flash 9 times, release the test button within 2 seconds. 3. JDs are removed and all settings will reset to

factory default.

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1. Have Z-Wave Controller entered association

2. Pressing test button three times within 1.5 Association seconds to enter the association mode. Note: The device support 1 groups. This group is for receiving the report message, like triggered event etc. This group support 8 nodes maximum.

Failed or success in add/remove the node ID can be viewed from 7-Wave Controller

Notice: Always reset a 7-Waye device before trying to add it to a 7-Wave network

Notice: When the device is into NWI mode, the sensor functionality will be disabled. The NWI mode will timeout after 30 seconds. You can press the button 3 times to abort the NWI mode.

After device is added to the network, it will wake-up once per day by default. When it wakes-up it will broadcast the "Wake Up Notification" message to the network, and wake-up 10 seconds to receive the setting commands. The wake-up interval minimum setting is 30 minutes, and maximum setting is 120 hours. Interval step is 30 minutes. If you want to wake-up device immediately, please press the button once. The device will wake-up for 10 seconds.

When Smoke Sensor detects, the device will report the trigger event and also report the battery status. By 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.

Smoke Detected/Test Report:

When the Smoke Sensor detects smoke, the device will unsolicitedly send the smoke detected (0x02) report to the nodes in the group 1. When the device is in alarm test mode, the device will unsolicitedly send the Smoke Sensor test (0x03) report to the nodes in the group 1.

Notification Type: Smoke (0x01) Event: Smoke detected, Unknown Location (0x02) Smoke Alarm Test (0x03)

Sensor Type: Smoke (0x02) Sensor Value: 0xFF

Tamper Report:

When the tamper is pressed, the device will fall into the alarm state. In that state, if tamper is released, the yellow LED will light up and the device will unsolicitedly send the report to the nodes in the group 1.

Notification Type: Home Security (0x07) Event: Tampering. Product covering removed (0x03)

Sensor Type: Tamper (0x08) Sensor Value: 0xEE

Notice : When the event is triggered, the device will report the messages to the nodes in the group 1. These messages also include the tamper status.

→ POWER UP PROCEDURE

NWI

When the device powers on, it will check if it is already added to the network. If it isn't, press the button to start the NWI mode. Until timeout or successful inclusion of device by controller. NWI mode can be aborted by pressing the button 3 times. Wake

When the device powers on, the device will wake-up for about 20 seconds. During this time, the controller can communicate with the device. Normally the device is always sleeping to save the battery energy.

→ POWER UP PROCEDURE

This device supports the Z-Wave firmware update via OTA. Put the controller into the firmware undate mode, and then press the button once to start the update. Please don't remove the battery, otherwise it will cause the firmware fail, and the device will cease to function. After update is complete, it is recommended that the user powers up the device.

Caution: After removing battery, please wait about 30 seconds, and then re-install the battery.

SECURITY NETWORK ■

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

COMMAND_CLASS_BATTERY COMMAND CLASS NOTIFICATION V4 COMMAND CLASS ASSOCIATION V2 COMMAND CLASS CONFIGURATION COMMAND_CLASS_SENSOR_BINARY_V2 COMMAND CLASS WAKE UP V2

→ TEST ALARM

Test the sensor by pushing firmly on the test button for around 2 seconds until the horn sounds, the sound nattern is 3 heeps pause, and then 3 beeps with red LED flashing continuously and rapidly, and the controller will receive Smoke alarm test notification. If the Smoke Sensor beeps three times with yellow LED flashing three times in 43 seconds, it indicates the Smoke Sensor is not working properly, it requires to be repaired. This is the only way to make sure that the Smoke Sensor device is working properly. If the device fails to test properly, have it repaired or replaced immediately. If you suspect that your Smoke Sensor does not go into alarm, test it by pressing the test button to ensure if it works properly.

Notice: To make sure the Smoke Sensor is in good working condition, weekly testing is highly reccommended.

→ TAMPER SWITCH FEATURE

If the Smoke Sensor is not mounted into the bracket properly, the tamper function is triggered and the yellow LED is steadily on. You will hear temporal three sound with yellow LED steadily on until Smoke Sensor is mounted back into bracket properly.

Notice

For all of the configuration parameters, the data size is 1.

The configuration marked with starV (*), means that after the removing the device, setting will still keep, without reverting back to factory settings, unless the user executes the "RESET" procedure.

The reserve bit or not supported bit is allowed any value, without effects

N0.	NAME	DEF.	VALID	DESCRIPTION
	(*) Customer Function	4	All	Customer function switch, using bit control
		0		Bit0: Reserve
		0		Bit1: Reserve
		1		Bit2: Reserve
7 [*]		0		Bit4: Notification type 0: Using Notification Report 1: Using Sensor Binary Report
		0		Bit5: Reserve
		0		Bit6: Reserve
		0		Bit7: Reserve

Re Ba	uto port ttery me	12	0~127	The interval time for auto report the battery level. 0 means turn off auto report battery. Each tick means 30 minutes. The default value is 12[6 hours]
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Z-WAVE COMMAND CLASSES

10

COMMAND CLASS ZWAVEPLUS INFO V2 COMMAND_CLASS_BATTERY COMMAND CLASS NOTIFICATION V4 COMMAND CLASS ASSOCIATION V2 COMMAND_CLASS_CONFIGURATION COMMAND CLASS MANUFACTURER SPECIFIC V2 COMMAND CLASS VERSION V2 COMMAND_CLASS_SENSOR_BINARY_V2 COMMAND_CLASS_WAKE_UP_V2 COMMAND CLASS ASSOCIATION GRP INFO COMMAND CLASS POWERLEVEL COMMAND_CLASS_DEVICE_RESET_LOCALLY COMMAND CLASS SECURITY COMMAND CLASS FIRMWARE UPDATE MD V2

TROUBLESHOOTING

Having trouble installing your new product? Zipato's website contains the latest user documentation and software updates for Zipato products and services: www.zinato.com

You can also find answers in the Zipato Community at: community.zipato.com

Zipato Support: support@zipato.com

LIMITED PRODUCT WARRANTY

→ GENERAL TERMS

Nothing in this Limited Product Warranty affects your statutory rights as a consumer.

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

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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 Zinato 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.

⊖ 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

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to anyone who obtains ownership of the ZIPATO Hardware Product from the original end-user purchaser.

PRODUCT WARRANTY PERIOD TABLE

PRODUCT TYPE	Smoke Sensor
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.

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 product in all material respects not 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



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

Marketing model: Smoke Sensor Regulatory model: ph-psg01 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+A2:2013

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: 11 this device may not cause harmful interference, and 21 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 thas 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



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 dropit off at your Zipatore -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.

⊖ COPYRIGHT

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