



Security Tech Germany

SHRM10000

ABUS Z-Wave Smoke detector



Important information and FAQs about this product and other products can be found on the website

www.abus.com

Version 1.0

*Original operating instructions in English.
Keep for future use!*



Summary

1. Introduction.....	3
1.1. Declaration of Conformity	3
1.2. Declaration of Service	3
1.3. Disclaimer of Liability	3
2. Important Safety Informations	4
2.1. Intended Use	4
2.2. Unboxing.....	4
2.3. Installation location / operating environment	4
2.4. Children	4
2.5. Information on handling batteries	5
2.6. Important information on battery disposal	5
2.7. Cleaning.....	5
2.8. Information on device disposal	6
3. Product introduction	6
3.1. Scope of delivery	6
3.2. Device features.....	6
3.3. Funktionsprinzip.....	7
3.4. Performance Features	7
3.5. Use in systems of different manufacturers	7
4. Selecting location	7
4.1. Special installation cases	8
Where smoke alarm devices should not be installed.....	9
4.2. Normal state	10
4.3. Testing the device electronics	10
4.4. Weak batteries.....	10
4.5. Self-test with automatic error message	10
4.6. Alarm state: Smoke	11
4.7. Alarm muting function (hush mode).....	11
5. Overview of functions	11
5.1. Inclusion / Add Device	11
5.2. Mounting & Installation	12
5.3. Exclusion / Remove device	13
5.4. Reset (Factory-Reset)	14
6. Advanced Z-Wave Parameter	14
6.1. Association Group Information	14
6.2. Supported Command Classes.....	15
7. Technical Specifications.....	15

1. Introduction

Dear customer,

We are pleased that you have chosen our product and thank you for your trust! You made a good choice.

This Magnetic contact (hereinafter referred to as the "device") has been developed and manufactured with the utmost care. Please read these operating instructions completely and observe all operating and safety instructions, as this ensures the best possible handling of the device. This document is an installation and maintenance manual.

All contained company names and product designations are trademarks of the respective owners. All rights reserved.

If you have any questions, please contact your specialist installer or specialist trade partner!

1.1. Declaration of Conformity

ABUS Security-Center hereby declares that the enclosed product comply with the requirements of the following directives

RED Directive (2014/53/EU), EMC Directive (2014/30/EU), Low Voltage Directive (2014/35/EU) and RoHS Directive (2011/65/EU). The full EU Declaration of Conformity text can be found at:

www.abus.com/product/SHRM10000

It can also be obtained at the following address:

**ABUS Security-Center GmbH & Co. KG,
Linker Kreuthweg 5, 86444 Affing, GERMANY**

1.2. Declaration of Service

This smoke detector has been tested and certified as a construction product in accordance with EU 305/2011. Production is monitored by regular and independent controls to ensure that legal and normative requirements are maintained.

You can find the declaration of performance **SHRM10000#2018** under www.abus.com/ger/Service/LeistungsErklaerungen

1.3. Disclaimer of Liability

These operating instructions have been prepared with the greatest care. Should you nevertheless notice omissions or inaccuracies, please inform us in writing at the above address.

Your rights are limited to the repair or replacement of this product as delivered. ABUS Security Center assumes no liability for any special, incidental or consequential damages, including but not limited to loss of revenue, loss of profit, restrictions in the use of the software, loss or recovery of data, costs for replacement equipment, downtime, property damage and claims of third parties, as a result of and in connection

with the use of the software. a. warranty, contractual, legal or claims for damages notwithstanding other limited or implied warranty provisions or in the event that the limited warranty does not apply, the scope of liability of ABUS Security Center is limited to the purchase price of the product.

The contents of this manual are subject to change without notice.

© ABUS Security-Center GmbH & Co. KG, 09/2018

2. Important Safety Informations

2.1. Intended Use

Only use the device for the purpose for which it was built and designed. Any other use is considered unintended.

All guarantee claims are invalid in the event of damage caused by non-compliance with this safety information. We cannot be held liable for resulting damage.

2.2. Unboxing

Handle the device with extreme care when unpacking it.

Packaging and packaging aids can be reused and, as far as possible, should be sent for recycling.

If the original packaging has been damaged, inspect the device first. If the device shows signs of damage, return it in the original packaging and inform the delivery service.

2.3. Installation location / operating environment

Do not place any heavy objects on the device. The device is only designed for operation in spaces with appropriate temperatures or humidity (e.g. bathrooms), or excessive accumulation of dust. Please refer to the individual devices' technical data for more detailed information. Ensure that: adequate ventilation is always guaranteed; no direct sources of heat can affect the device; interior devices are not exposed to direct sunlight or strong artificial light; the device is not in the immediate vicinity of magnetic fields (e.g. loudspeakers); no naked flames (e.g. lit candles) are placed on or next to the device; sprayed or dripping water is prevented from coming into contact with interior devices and caustic fluids are avoided; the device is not operated in the vicinity of water, in particular, the device should never be submerged (do not place objects containing fluids, e.g. vases or drinks, on or near the device); no foreign bodies penetrate the device; the device is not exposed to wide temperature variations, as otherwise there may be condensation from humidity causing electrical short circuits; the device is not exposed to excessive shock or vibration.

2.4. Children

Keep electrical devices out of reach of children. Never allow children to use electrical devices unsupervised. Children may not always properly identify possible hazards. Small parts may be fatal if swallowed. Keep packaging film away from children. There is a risk of suffocation. This device is not intended for children. If used incorrectly, parts under spring tension may fly out and cause injury to children (e.g. to eyes).

2.5. Information on handling batteries

- Make sure that batteries are kept away from small children. Children may put batteries in their mouths and swallow them. This can cause serious harm to their health. If this happens, consult a doctor immediately.
- Do not charge normal batteries, heat them up or throw them into naked flames (they may explode).
- The battery must not be directly exposed to heat or sunlight, and must not be stored in a place with a very high temperature.
- The battery must not come into contact with water.
- The battery must not be dismantled, pierced or otherwise damaged.
- The battery contacts must not be short-circuited.
- Change low batteries in good time.
- Always change all the batteries at the same time and use batteries of the same type.
- Leaky or damaged batteries can cause chemical burns on contact with the skin. In this case, wear protective gloves. Clean the battery compartment with a dry cloth.

2.6. Important information on battery disposal



Batteries with this label do not contain harmful substances such as cadmium, lead and mercury. However, used batteries must not be disposed of along with household waste in accordance with the battery directive. To protect natural resources and promote the recycling of materials, separate the batteries from other waste and deposit them at a local recycling center. An additional label with the chemical symbols for Hg, Cd or Pb means that the batteries contain quantities of mercury, cadmium or lead which exceed the restrictions set by the EU Directive 2006/66/EG. If batteries are not disposed of properly, these substances can cause harm to human health or the environment

2.7. Cleaning

In accordance with the German application standard DIN 14676, the functionality of each installed smoke detector must be regularly checked and ensured by maintenance measures.

This includes an inspection at least once every 12 ± 3 months including maintenance and functional testing of the warning signals.

The results and measures must be documented accordingly.

- Dusty detectors must be cleaned. Dust deposits in the air slots of the detector can be sucked off or blown out.
- If necessary, the dust can be removed with a brush.
- The surface can be cleaned with a cloth slightly moistened with soapy water.
- Make sure that no water gets inside the unit! Do not clean the appliance in the dishwasher!

- Do not use sharp, pointed, abrasive, caustic cleaning agents, chemicals or hard brushes!

Warning



The electronic components of every smoke detector are subject to ageing processes. In addition, insect screens and smoke measuring chambers inevitably become dirty over time.

In order to be able to guarantee the full function of every smoke alarm device, it must be replaced no later than 10 years after commissioning!

2.8 Information on device disposal



3 Important: The EU Directive 2012/19/EU regulates the proper return, treatment and recycling of used electronic devices. This symbol means that in the interest of environmental protection the device must be disposed of separately from household or industrial waste at the end of its service life in accordance with applicable local legal guidelines.

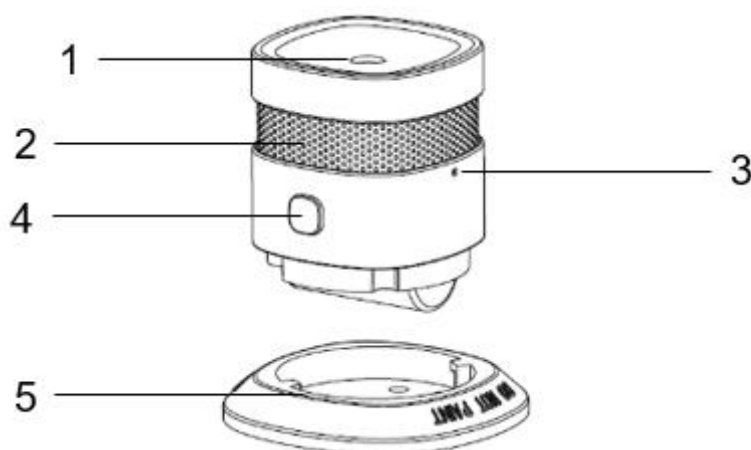
Disposing of used devices can be done at official recycling centers in your country. Obey local regulations when disposing of material. Further details on returns (also for non-European countries) can be obtained at your local authority. Separate collection and recycling saves natural resources and ensures that all the provisions for protecting health and environment are observed when recycling the product.

3. Product introduction

3.1. Scope of delivery

- ABUS Z-Wave Smoke detector
- Quickguide & Safety Instructions
- Installation material

3.2. Device features



Nr	Label	Comment
1	Sound outlet opening	
2	Smoke inlet opening	
3	Network button	For inclusion / exclusion of the detector in a Z-Wave gateway, factory reset and tamper alarm
4	Test/hush Button Control Light (LED)	The control light is located under the Test/hush button and shines through it
5	Detector base	With mounting holes

3.3. Funktionsprinzip

The SHRM10000 was developed for use in home automation systems that use the Z-Wave wireless standard. The detector alarms loudly thanks to the integrated siren (> 85dB). When the battery level is low, the detector automatically gives feedback to the gateway.

In conjunction with configurable scenes, smart functions can also be initiated in addition to the alarm, e.g. smoke detector triggers, front door unlocks for emergency services.

3.4. Performance Features

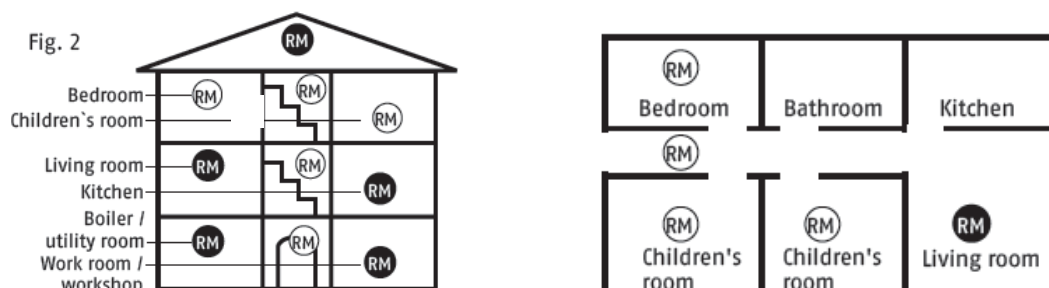
The ABUS Z-Wave SHRM10000...:

- ...is a battery-operated radio smoke detector
- ...is Z-Wave PLUS compatible & certified
- ...supports the Z-Wave S2 Standard (Security 2)
- ...reliably detects smoke development
- ...alerts in case of fire via loudspeaker and alarm message to the gateway
- ... has a battery-empty warning function
- ...was developed for indoor installation

3.5. Use in systems of different manufacturers

Communication is via the Z-Wave EU frequency (868.42 Mhz). You can integrate the device into any Z-Wave network with a certified Z-Wave gateway, regardless of manufacturer. All non-battery powered nodes in the network act as repeater to increase the durability of the network.

4. Selecting location



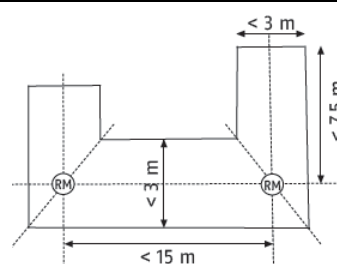
Smoke alarm devices are to be used as the bare minimum equipment in all bedrooms, children's rooms and hallways which act as escape routes, and are to be installed in each case in the middle of the room, on the ceiling only (do not install on a wall) (Fig. 2). Select the highest installation location with a minimum distance of 50 cm to surrounding walls, furniture and lamps. In the case of sloping ceilings with an angle of over 20°, detectors should be installed 0.5 - 1 m away from the highest point. Configuration is optimal when devices are located in all other rooms as well as staircases. In washrooms (bathrooms, lavatories etc.), a smoke alarm device is generally not necessary because the risk of fire is low.

Please note the graphics in this manual and the detailed information available in the EN14676 standard "Smoke alarm devices for use in residential buildings, apartments and rooms with similar purposes – Installation, use and maintenance".

4.1. Special installation cases

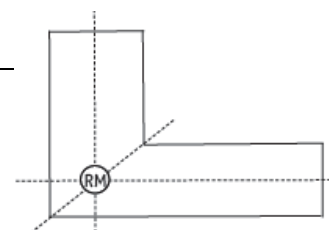
Installation in a hallway with a width of < 3 m

- Maximum distance from the front walls: 7.5 m
- Maximum distance between detectors: 15 m
- Installation on the mitre line between intersecting crossings, T-junctions and corner areas



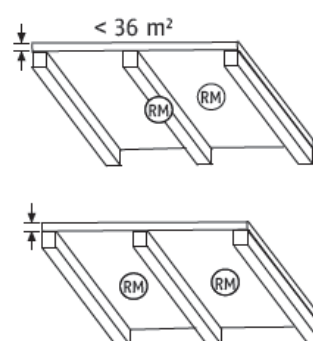
Installation in an L-shaped room

- Total area of < 60m²: installation on the mitre line
- Total area of > 60m²: each side is treated as a separate room



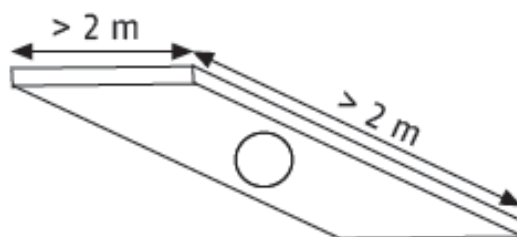
Ceiling beams

- In the case of ceiling beams measuring > 0.2 m and a total area of < 36 m², detectors should be installed in the centre of the room either on a beam or ceiling panel.
- In the case of ceiling beams measuring > 0.2 m and a total area of > 36 m², detectors should be installed in the centre of each ceiling panel and not on the beams.



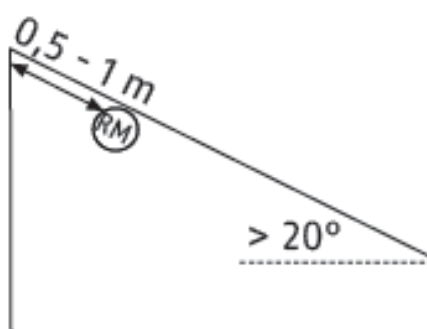
Mezzanines and landings

- In the case of mezzanines and landings with a length and width of > 2 m and a total area of > 16 m², an additional smoke alarm should be installed in the centre of the surface area.



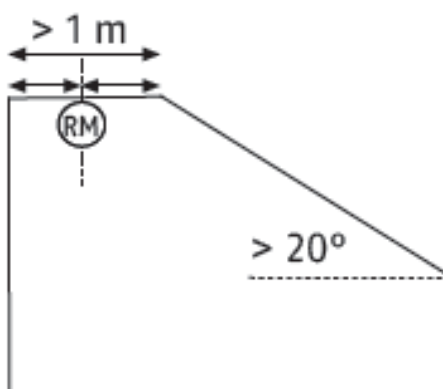
Sloped ceilings

- There are no special requirements for ceilings sloped at an angle of $< 20^\circ$.
- In the case of ceilings sloped at an angle of $> 20^\circ$, detectors should be installed 0.5–1 m away from the highest point.



Partially sloped ceilings

- The instructions for fully sloped ceilings apply for partially sloped ceilings with a horizontal ceiling surface measuring < 1 m in width.
- In the case of partially sloped ceilings with a horizontal ceiling surface measuring > 1 m, detectors should be installed in the centre of the horizontal surface.



Where smoke alarm devices should not be installed



- Outside (use only in closed rooms)
- In an mounting height > 6 meters

- In rooms in which the alarm could be triggered by disturbance variables (steam, condensation, “normal” smoke, vapour, dust, dirt or grease)
- Next to an air duct or similar ventilation opening (draughts)
- In areas in which the temperature can fall below 0°C or rise to over 40°C

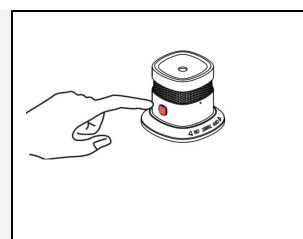
4.2. Normal state

In the normal state, the red control LED under the housing cover flashes once every 53 seconds and signals that the detector is ready for operation.

4.3. Testing the device electronics

Regularly check the functionality of the smoke alarm device by pressing the Test button. The warning tone signals and the red “ALARM” LED flashes quickly

This does not indicate that smoke is present in the air in the room; it is a confirmation that the smoke alarm device is functioning properly.



Test the functionality of the detector after installation without fail. A regular test is also recommended.



Keep the device at arm's length to protect your hearing.



To carry out a test, press the Test button shortly.

4.4. Weak batteries

If the detector's battery charge falls below a certain value, the detector signals this with a Red LED Flash and an acoustic warning tone (every 53 seconds). If this warning signal sounds, the detector batteries must be immediately replaced with new batteries.



From the time of the first battery warning signal, the detector is still operable and completely functional for at least 7 more days.

4.5. Self-test with automatic error message

The smoke alarm device periodically runs a self-test.

If the trigger sensitivity of the detector falls below the required minimum threshold (e.g. as a result of excess contamination of the smoke measurement chamber), the detector beeps twice and the red LED flashes every 53 seconds.



If the error message does not clear after the detector has been cleaned, the detector must be replaced immediately (see “Care and maintenance” chapter).

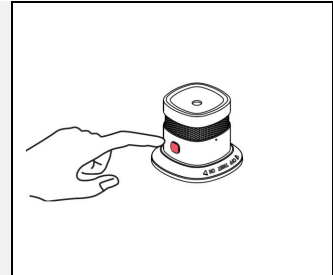
4.6. Alarm state: Smoke

If smoke is detected, a loud, pulsing alarm tone sounds and the red LED flashes at the same time at short intervals. In this case, proceed as described in the “Behaviour in case of alarm” chapter.

4.7. Alarm muting function (hush mode)

If the detector is in the alarm state, the acoustic alarm can be deactivated for 10 minutes by pressing the Test button. If the muting function is active, the red LED flashes every 10 seconds.

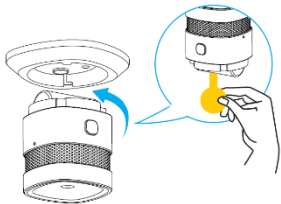
If smoke is still detected in the smoke measurement chamber after the 10-minute muting period, the acoustic alarm will sound again.



5. Overview of functions

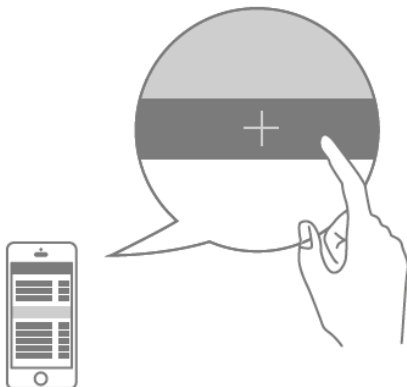
5.1. Inclusion / Add Device

A

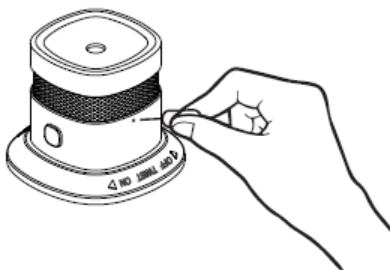


Slide the base unit from the mounting plate and remove the safety strip from the battery compartment

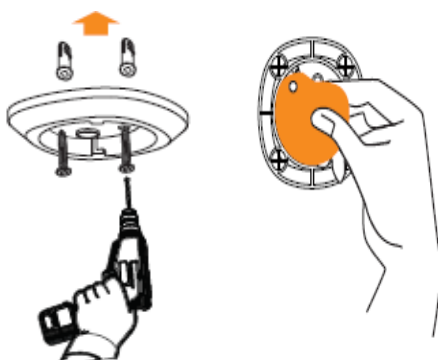
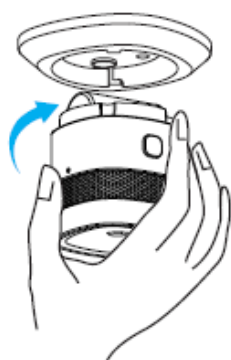
B

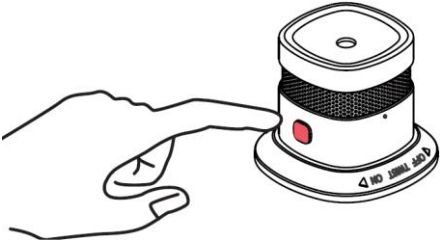


Click the + (Add) button in your Z-Wave App and follow the further instructions

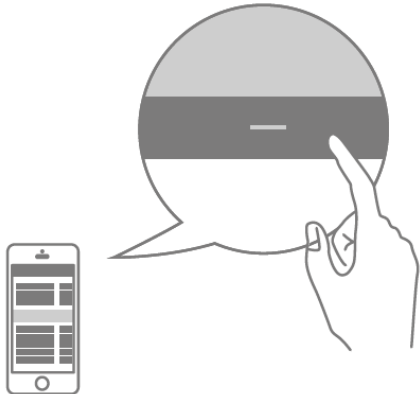
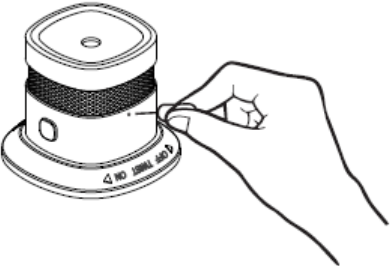
<p>C</p> 	<p>Press the Network-button 3 times within 1.5 seconds and the Status-LED on the base unit front will flash 3 times</p> <p>The App will show if the Add device process was successful and the Status-LED will turn off</p> <p>Repeat the inclusion process from step B if it was not successful.</p>
---	--

5.2. Mounting & Installation

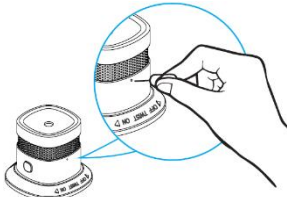
<p>A</p> 	<p>Fasten the mounting plate to the ceiling with the screws (recommended)</p> <p>Alternative: Loosen the cover of the double-sided adhesive and glue the mounting plate to the ceiling.</p> <p>Note: When marking the drill holes, make sure that there are no electrical lines/cables, pipes or other important installation components behind the installation site! Failure to observe the instructions on site selection and installation may result in injury, e.g. due to falling smoke alarm detectors</p>
<p>B</p> 	<p>Mount the device on the mounting bracket by turning it clockwise to lock it into place</p>

<p>C</p> 	<p>Check the functionality of the smoke alarm device by pressing the Test button. The warning tone signals and the red “ALARM” LED flashes quickly</p> <p>This does <u>not</u> indicate that smoke is present in the air in the room; it is a confirmation that the smoke alarm device is functioning properly.</p>
---	---


5.3. Exclusion / Remove device

<p>A</p> 	<p>Click the - (Remove) button in your Z-Wave App and follow the further instructions</p>
<p>B</p> 	<p>Press the Network-button 3 times within 1.5 seconds and the Status-LED on the base unit front will flash 3 times</p> <p>The App will show if the Remove device process was successful and the Status-LED on device will flash 6 times</p> <p>Repeat the exclusion process from step A if it was not successful.</p>

5.4. Reset (Factory-Reset)

	<ol style="list-style-type: none"> 1. Remove the battery 2. Press the Network button and keep it pressed while inserting the battery again. 3. Device will restore factory settings <p>Note:</p> <ol style="list-style-type: none"> 1, This procedure should only be used if the primary gateway is not capable of acting. 2, If the multi-sensor is set to the factory setting, the status is set to "not included", the association settings and possible configurations are reset to default.
---	--

5.5 Battery change

	<ol style="list-style-type: none"> 1. Turn the device anticlockwise and remove it from the mounting bracket and remove the old battery 2. Insert a new battery, ensure that the polarity is correct 3. Test the smoke alarm device. To do so, press and release the test button. The alarm will sound loud short beeps indicating that the smoke detector works normally <p>Turn the detector back onto the bracket</p>
--	--

6. Advanced Z-Wave Parameter

6.1. Association Group Information

Z-Wave devices can control other devices directly. This direct control is called in Z-Wave association. For this purpose, the device ID of the device to be controlled must be stored in the controlling devices. This is done in so-called association groups. An association group is always linked to an event in the controlling device (pressing a key or triggering a sensor). When this event occurs, a control command - usually a BASIC SET - is sent to all devices stored in an association group.

The smoke detector supports the following association groups:

Group Number	Maximum Devices	Transmitted Content
Group 1	0x05	Association group 1: Lifeline association group Include command classes: Battery report, Notification report, and Device Reset Locally notification, Binary report.
Group 2	0x05	Association group 2: Root Device group(Binary Sensor) Binary Sensor Command Class: Compatible with 300 series 1-Binary Sensor reports status of smoke or no smoke via Lifeline. 2-When the sensor detects status change between smoke and no smoke, the device will be triggered.
Group 3	0x05	Association group 3: Root Device group(Notification) 1-Notification reports reports status of detect smoke or no smoke via Lifeline. 2-When the sensor detects status change between smoke and no smoke, the device will be triggered.

6.2. Supported Command Classes

- 1 Z-Wave plus Info Version 2
- 2 Notification Version 8
- 3 Association Version 2
- 4 Association Group Info Version 1
- 5 Transport Service Version 2
- 6 Version Version 3
- 7 Manufacturer Specific Version 2
- 8 Device Reset Locally Version 1
- 9 Powerlevel Version 1
- 10 Battery Version 1
- 11 Security 2 Version 1
- 12 Supervision Version 1
- 13 Wake Up Version 2

7. Technical Specifications

Parameters	Unit	SHRM10000
Dimensions	mm	60 x 60 x 49,2
Weight	g	66
Operating Temperature	°C	0 – 40
Max. Humidity	%	95
IP Class		20
Radio frequency	MHz	868,42 (Z-Wave PLUS, Europe)
Material		ABS, poliert
Transmission power	db	< 4,5
Power supply		3 V DC
Battery type		CR123 (CR17335) EVE (1500mA)

Power consumption standby	mA	0,01
Power consumption trigger	mA	90
Battery-life		5 Jahre (1 trigger per month + 1 heartbeat per day + 1 active report per day)
Range (open field)	m	100
Range (building)	m	20, related to material of walls
Tamper protection		No
Firmware updateable		No
Support Z-Wave Beaming		No
SmartStart supported		No
Z-Wave Network Security		Yes
Z-Wave AES-128 Security		Yes
Z-Wave Plus		Yes
Security S2 Classes		Yes
Z-Wave Chip Generation		500
Z-Wave Sensor-Typ		Open/Closed (Binary)
Zwave library type		Routing Slave
Device Type / Role type		Notification sensor / Reporting sleeping slave