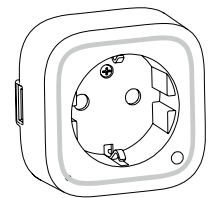




Smart Dimmer 6

View the expanded manual:
<http://aeotec.com/support>



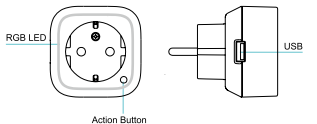
1 Aeotec by Aeon Labs Smart Dimmer.

Aeotec Smart Dimmer 6 is a low-cost Z-Wave® Dimmer plug-in module specifically used to enable Z-Wave command and control (on/off/dim) of any incandescent bulbs, dimmable LED bulbs, halogen bulbs with or without transformers. It can report immediate wattage consumption or kWh energy usage over a period of time. In the event of power failure, non-volatile memory retains all programmed information relating to the unit's operating status.

Its surface has a Smart RGB LED, which can be used for indicating the output load status or strength of the wireless signal. You can configure its indication colour according to your favour.

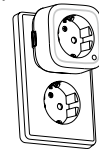
The Smart Dimmer 6 is a security Z-wave device and supports Over The Air (OTA) feature for the products firmware upgrade.

2 Familiarize yourself with your Smart Dimmer.

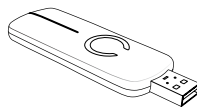


3 Quick start.

Getting your Smart Dimmer up and running is as simple as plugging it into a wall socket and linking it to your Z-Wave network. The following instructions tell you how to add your Smart Dimmer to your Z-Wave network via Aeotec by Aeon Labs' Z-Stick or Minimote controller. If you are using other products as your main Z-Wave controller, such as a Z-Wave gateway, please refer to the part of their respective manual that tells you how to add new devices to your network.

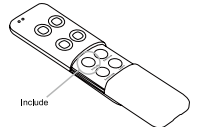


If you're using a Z-Stick:



1. Decide on where you want your Smart Dimmer to be placed and plug it in to a wall outlet. Its RGB LED will blink when you press the Action Button on the Smart Dimmer.
2. If your Z-Stick is plugged into a gateway or a computer, unplug it.
3. Take your Z-Stick to your Smart Dimmer.
4. Press the Action Button on your Z-Stick.
5. Press the Action Button on your Smart Dimmer.
6. If Smart Dimmer has been successfully added to your Z-Wave network, its RGB LED will no longer blink. If the adding was unsuccessful, the red LED will be solid for 2 seconds and then remain colourful gradient status, repeat the instructions from step 4.
7. Press the Action Button on the Z-Stick to take it out of inclusion mode, and then return it to your gateway or computer.

If you're using a Minimote:



1. Decide on where you want your Smart Dimmer to be placed and plug it in to a wall socket. Its RGB LED will blink when you press the Action Button on the Smart

- Dimmer.
2. Take your Minimote to your Smart Dimmer.
3. Press the Include button on your Minimote.
4. Press the Action Button on your Smart Dimmer.
5. If Smart Dimmer has been successfully added to your Z-Wave network, its RGB LED will no longer blink. If the adding was unsuccessful, the red LED will be solid for 2 seconds and then remain colourful gradient status, repeat the instructions from step 4.
6. Press any button on your Minimote to take it out of inclusion mode.

With your Smart Dimmer now working as a part of your smart home, you'll be able to configure it from your home control software. Please refer to your software's user guide for precise instructions on configuring Smart Dimmer to your needs.

The colour of RGB LED will change according to the output load power level when it is in Energy mode:

Version	LED indication	Output (W)
US	Green	[0W, 180W)
	Yellow	[180W, 240W)
	Red	[240W, 300W)
AU	Green	[0W, 345W)
	Yellow	[345W, 460W)
	Red	[460W, 575W)

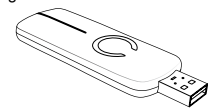
Version	LED indication	Output (W)
EU	Green	[0W, 345W)
	Yellow	[345W, 460W)
	Red	[460W, 575W)

You can also configure the brightness of RGB LED when the Smart Dimmer is in Energy mode, Momentary Indicate mode, or Night Light mode.

Removing your Smart Dimmer from a Z-Wave network.

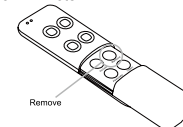
Your Smart Dimmer can be removed from your Z-Wave network at any time. You'll need to use your Z-Wave network's main controller to do this and the following instructions which will tell you how to do this using an Aeotec by Aeon Labs' Z-Stick or Minimote controller. If you are using other products as your main Z-Wave controller, please refer to the part of their respective manuals that tells you how remove devices from your network.

If you're using a Z-Stick:



1. If your Z-Stick is plugged into a gateway or a computer, unplug it.
2. Take your Z-Stick to your Smart Dimmer.
3. Press and hold the Action Button on your Z-Stick for 3 seconds and then release it.
4. Press the Action Button on your Smart Dimmer.
5. If your Smart Dimmer has been successfully removed from your network, its RGB LED will remain the colourful gradient status. If the removal was unsuccessful, the RGB LED will be solid, repeat the instructions from step 3.
6. Press the Action Button on the Z-Stick to take it out of removal mode.

If you're using a Minimote:



1. Take your Minimote to your Smart Dimmer.
2. Press the Remove Button on your Minimote.
3. Press the Action Button on your Smart Dimmer.
4. If your Smart Dimmer has been successfully removed from your network, its RGB LED will remain the colourful gradient status. If the removal was

unsuccessful, the RGB LED will be solid, repeat the instructions from step 2.

4 Advanced functions.

Changing RGB LED mode.

You can change the mode of how the RGB LED acts through configuring the Smart Dimmer. There are 3 different modes: Energy mode, Momentary indicate mode, and Night light mode.

Energy mode will allow the LED to follow the state of the Smart Dimmer, when the dimmer is on, the LED will be on, and while the dimmer is off, the current colour LED will be off and then the purple LED remains on. Momentary indicate mode will momentarily turn the LED on for 5 seconds then turn off after every state change in the dimmer. Night light mode will allow the LED to be turned on and off during your selected time of day you have configured for it.

Parameter 81 [1 byte dec] is the parameter that will set one of the 3 different modes. If you set this configuration to:

- (0) Energy Mode
- (1) Momentary Indicate Mode
- (2) Night Light Mode

- Security or Non-security feature of your Smart Dimmer in Z-wave network.

If you want your Smart Dimmer as a non-security device in Z-wave network, you just need to press the Action Button once on Smart Dimmer when you use a controller/gateway to add/include your Smart Dimmer.

In order to take full advantage of the Smart Dimmers functionality, you may want your Smart Dimmer as a security device that uses secure/encrypted message to communicate in your Z-wave network, so a security enabled controller/gateway is needed. You need to press the Smart Dimmer's Action Button 2 times within 1 second when your security controller/gateway starts the network inclusion.

- Reset your Smart Dimmer.

If at some stage, your primary controller is missing or inoperable, you may wish to reset all of your Smart Dimmer's settings to their factory defaults. To do this, press and hold the Action Button for 20 seconds and then release it. Your Smart Dimmer will now be reset to its original settings, and the green LED will be solid for 2 seconds and then the RGB LED remains the colourful gradient status as a confirmation.

5 Technical specifications.

Model number: ZW099.

Max standby power: 0.8W.

USB output: DC 5V±5%, 1000mA.

Operating temperature: 0°C to 40°C/32°F to 104°F.

Relative humidity: 8% to 80%.

Supported load type: Incandescent bulbs, dimmable

LED bulbs, halogen bulbs with or without transformers.

Operating distance: Up to 300 feet/100 meters outdoors.

AC input:

Version	Input	Working band
AU	230V 50Hz, Max: 2.5A	921.42MHz
BR	220V 60Hz, Max: 2.5A	921.42MHz
CN	220V 50Hz, Max: 2.5A	868.42MHz
EU	230V 50Hz, Max: 2.5A	868.42MHz
IL	230V 50Hz, Max: 2.5A	868.42MHz
IN	230V 50Hz, Max: 2.5A	865.22MHz
UK	230V 50Hz, Max: 2.5A	868.42MHz
US	120V 60Hz, Max: 2.5A	908.42MHz

6 Warranty.

Aeon Labs warrants to the original purchaser of Products that for the Warranty Period (as defined below), the

Products will be free from material defects in materials and workmanship. The foregoing warranty is subject to the proper installation, operation and maintenance of the Products in accordance with installation instructions and the operating manual supplied to Customer. Warranty claims must be made by Customer in writing within thirty (30) days of the manifestation of a problem. Aeon Labs' sole obligation under the foregoing warranty is, at Aeon Labs' option, to repair, replace or correct any such defect that was present at the time of delivery, or to remove the Products and to refund the purchase price to Customer.

The "Warranty Period" begins on the date the Products is delivered and continues for 12 months.

Any repairs under this warranty must be conducted by an authorized Aeon Labs service representative and under Aeon Labs' RMA policy. Any repairs conducted by unauthorized persons shall void this warranty.

Excluded from the warranty are problems due to accidents, acts of God, civil or military authority, civil disturbance, war, strikes, fires, other catastrophes, misuse, misapplication, storage damage, negligence, electrical power problems, or modification to the Products or its components.

Aeon Labs does not authorize any person or party to assume or create for it any other obligation or liability in connection with the Products except as set forth herein.

Aeon Labs will pass on to Customer all manufacturers' Material warranties to the extent that they are transferable, but will not independently warrant any Material.

Customer must prepay shipping and transportation charges for returned Products, and insure the shipment or accept the risk of loss or damage during such shipment and transportation. Aeon Labs will ship the repaired or replacement products to Customer freight prepaid.

Customer shall indemnify, defend, and hold Aeon Labs and Aeon Labs' affiliates, shareholders, directors, officers, employees, contractors, agents and other representatives harmless from all demands, claims, actions, causes of action, proceedings, suits, assessments, losses, damages, liabilities, settlements, judgments, fines, penalties, interest, costs and expenses (including fees and disbursements of counsel) of every kind (i) based upon personal injury or death or injury to property to the extent any of the foregoing is proximately caused either by a defective product (including strict liability in tort) or by the negligent or willful acts or omissions of Customer or its officers, employees, subcontractors or agents, and/or (ii) arising from or relating to any actual or alleged infringement or misappropriation of any patent, trademark, mask work, copyright, trade secret or any actual or alleged violation of any other intellectual property rights arising from or

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THE INDEMNITY AND WARRANTY IN ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER INDEMNITIES OR WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Warning

FCC NOTICE (for USA)

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT.SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.
STORE INDOORS WHEN NOT IN USE. SUITABLE FOR DRY LOCATIONS. DO NOT IMMERSE IN WATER. NOT FOR USE WHERE DIRECTLY EXPOSED TO WATER.

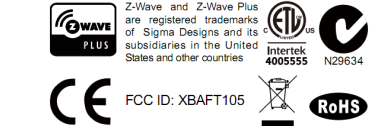
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interference received, including interference that may cause undesired operation. 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.
- Consul the dealer or an experienced radio/TV technician for help.

Warning

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available.



Version:501009900001-X01

www.aeotec.com



Aeon Labs Smart Dimmer 6 Engineering Specifications and Advanced Functions for Developers

Aeon Labs Smart Dimmer is a Z-Wave multilevel switch device based on Z-Wave enhanced 232 slave library V6.51.06.

Its surface has the Smart RGB LEDs on, which can be used for indicating the output load status, the strength of wireless signal. You can also configure its indication colour according to your favour.

It 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.

It is also a security Z-wave device and supports the Over The Air (OTA) feature for the product's firmware upgrade. As soon as Smart Dimmer is removed from a z-wave network it will be restored into default factory setting.

1. Library and Command Classes

1.1 SDK: 6.51.06

1.2 Library

- Basic Device Class: BASIC_TYPE_ROUTING_SLAVE
- Generic Device class: GENERIC_TYPE_SWITCH_MULTILEVEL
- Specific Device Class: SPECIFIC_TYPE_POWER_SWITCH_MULTILEVEL

1.3 Commands Class

	Included Non-Secure Network	Included Secure Network
Node Info Frame	COMMAND_CLASS_ZWAVEPLUS_INFO V2 COMMAND_CLASS_SWITCH_MULTILEVEL V2 COMMAND_CLASS_COLOR_SWITCH COMMAND_CLASS_MULTI_CHANNEL_V4 COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3 COMMAND_CLASS_METER V3 COMMAND_CLASS_SWITCH_ALL V1 COMMAND_CLASS_CONFIGURATION V1 COMMAND_CLASS_ASSOCIATION_GRP_INFO V1 COMMAND_CLASS_ASSOCIATION V2 COMMAND_CLASS_MANUFACTURER_SPECIFIC V2 COMMAND_CLASS_VERSION V2 COMMAND_CLASS_FIRMWARE_UPDATE_MD V2 COMMAND_CLASS_POWERLEVEL V1 COMMAND_CLASS_CLOCK V1 COMMAND_CLASS_MARK V1 COMMAND_CLASS_DEVICE_RESET_LOCALLY V1 COMMAND_CLASS_HAIL V1	COMMAND_CLASS_ZWAVEPLUS_INFO V2 COMMAND_CLASS_VERSION V2 COMMAND_CLASS_MANUFACTURER_SPECIFIC V2 COMMAND_CLASS_SECURITY V1 COMMAND_CLASS_MARK V1 COMMAND_CLASS_DEVICE_RESET_LOCALLY V1 COMMAND_CLASS_HAIL V1
Security Command Supported Report Frame	–	COMMAND_CLASS_ASSOCIATION_GRP_INFO V1 COMMAND_CLASS_SWITCH_MULTILEVEL V2 COMMAND_CLASS_SWITCH_ALL V1 COMMAND_CLASS_COLOR_SWITCH COMMAND_CLASS_MULTI_CHANNEL_V4 COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3 COMMAND_CLASS_METER V3 COMMAND_CLASS_CONFIGURATION V1 COMMAND_CLASS_ASSOCIATION V2

COMMAND_CLASS_POWERLEVEL V1
COMMAND_CLASS_CLOCK V1
COMMAND_CLASS_FIRMWARE_UPDATE_MD V2

2. Technical Specifications

Model number: ZW099

Operating distance: Up to 300 feet/100 meters outdoors.

Input: 120V~, 60Hz. (USA Version)

230V~, 50Hz. (EU, AU, CN Version)

230V~, 60Hz. (BR version)

Output: 120V~, 60Hz, Max 2.5A Resistor load. (USA Version)

230V~, 50Hz, Max 2.5A Resistor load. (EU Version)

230V~, 50Hz, Max 2.5A Resistor load. (CN Version)

230V~, 50Hz, Max 2.5A Resistor load. (AU Version)

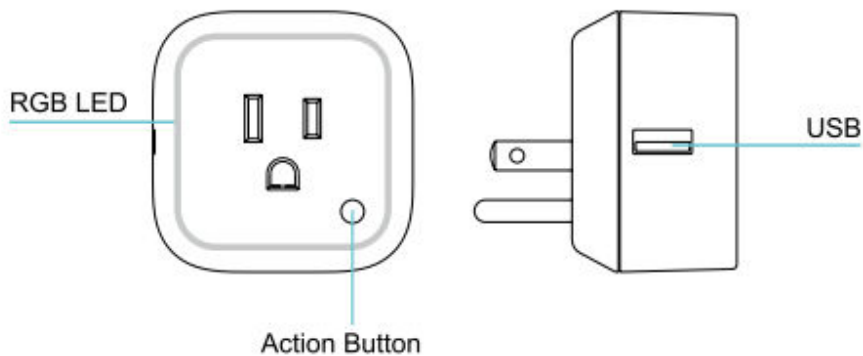
230V~, 60Hz, Max 2.5A Resistor load. (BR Version)

Operating temperature: 0°C to 40°C.

Relative humidity: 8% to 80%.

3. Familiarize yourself with your Smart Switch

3.1 Interface



4. All functions of each trigger

4.1 Function of Action Button

Trigger	Description
Short press one time	<p>1. Send non-security Node Info frame.</p> <p>2. Add Smart Dimmer into a z-wave network:</p> <ol style="list-style-type: none"> 1. Insert the Smart Dimmer to power socket, The RGB LED will be colorful gradient status. 2. Let the primary controller into inclusion mode (If you don't know how to do this, refer to its manual). 3. Press the Action button. 4. If the inclusion success, Smart Dimmer LED will be solid. Otherwise, the LED will remain colorful gradient status, in which you need to repeat the process from step 2.

	<p>3. Remove Smart Dimmer from a z-wave network:</p> <ol style="list-style-type: none"> 1. Insert the Smart Dimmer to power socket, The Smart Dimmer LED will be solid. 2. Let the primary controller into remove mode (If you don't know how to do this, refer to its manual). 3. Press the Action button. 4. If the remove is successful, Smart Dimmer LED will be colorful gradient status. If Smart Dimmer LED still be solid, please repeat the process from step 2.
Short press 2 times	<p>1. Send Security Node Info frame.</p> <p>2. Add Smart Dimmer into a z-wave network:</p> <ol style="list-style-type: none"> 1. Insert the Smart Dimmer to power socket, The LED will be colorful gradient status. 2. Let the primary controller into inclusion mode (If you don't know how to do this, refer to its manual). 3. Press the Action Button. 4. If the inclusion success, Smart Dimmer LED will be solid. Otherwise, the LED will remain colorful gradient status, in which you need to repeat the process from step 2. <p>3. Remove Smart Dimmer from a z-wave network:</p> <ol style="list-style-type: none"> 1. Insert the Smart Dimmer to power socket, The Smart Dimmer LED will be solid. 2. Let the primary controller into remove mode (If you don't know how to do this, refer to its manual). 3. Press the Action button. 4. If the remove success, Smart Dimmer LED will be colorful gradient status. If Smart Dimmer LED still be solid, please repeat the process from step 2.
Press and hold 20 seconds	<p>Reset Smart Dimmer to factory Default:</p> <ol style="list-style-type: none"> 1. Make sure the Smart Dimmer has been connected to the power supply. 2. Press and hold the Z-wave button for 20 seconds. 3. If holding time more than one second, the LED will blink faster and faster. If holding time more than 20seconds, the green LED will be on for 2 seconds and then remain colorful gradient status, it indicates reset success, otherwise please repeat step 2. <p>Note:</p> <ol style="list-style-type: none"> 1, This procedure should only be used when the primary controller is inoperable. 2, Reset Smart Dimmer to factory default settings will: <ol style="list-style-type: none"> a), exclude the Smart Dimmer from Z-Wave network; b), delete the Association setting, power measure value, Scene Configuration settings and restore the Configuration settings to their defaults.

4.2 RGB LED indication when Smart Dimmer is in Energy Mode

RGB	RGB indication	Status
RGB LED	Purple color (10%)	Output load is turned off.
	Green	Output load is in small wattage range. US version , the range of load wattage is [0W, 180W) AU version , the range of load wattage is [0W, 345W) EU version , the range of load wattage is [0W, 345W)
	Yellow	Output load is in big wattage range. US version , the range of load wattage is [180W, 240W) AU version , the range of load wattage is [345W, 460W) EU version , the range of load wattage is [345W, 460W)
	Red	Output load is in warning wattage range. US version , the range of load wattage is [240W,300W) AU version , the range of load wattage is [460W, 575W) EU version , the range of load wattage is [460W, 575W)

4.3 RGB LED indication when Smart Dimmer is in Wireless Power level Test Mode

RGB	RGB indication	Status
RGB LED	Purple LED fast blink	Enter into the wireless power level test mode
	Green LED is switched to ON state for 2 seconds	wireless power level is good
	Yellow LED is switched to ON state for 2 seconds	wireless power level is acceptable but latency can occur
	Red LED is switched to ON state for 2 seconds	wireless power level is insufficient

5. Special rule of each command

5.1 Z-Wave Plus Info Report Command Class

Parameter	Value
Z-Wave Plus Version	1
Role Type	5 (ZWAVEPLUS_INFO_REPORT_ROLE_TYPE_SLAVE_ALWAYS_ON)
Node Type	0 (ZWAVEPLUS_INFO_REPORT_NODE_TYPE_ZWAVEPLUS_NODE)
Installer Icon Type	0x0600 (ICON_TYPE_GENERIC_LIGHT_DIMMER_SWITCH)
User Icon Type	0x0600 (ICON_TYPE_GENERIC_LIGHT_DIMMER_SWITCH)

5.2 Basic Command Class

Basic Set=0x01 to 0x63 or 0xFF, turn ON output load.

Basic Set=0x00, turn OFF output load.

5.3 Association Command Class

Smart Dimmer supports 2 association groups and Max 5 nodes for each group.

Association Group	Nodes	Send Mode	Send commands
Group 1	0	N/A	N/A
	1 [2,5]	Single Cast	When the state of Smart Dimmer(on/off/dim the load) is changed: 1, Set Configuration parameter 80 to 0: Reserved (Default). 2, Set Configuration parameter 80 to 1: Send Hail CC. 3. Set Configuration parameter 80 to 2: Send the Basic Report.
Group 2	0	N/A	N/A
	[1,5]	Single Cast	Forward the Basic Set, Switch Multilevel Start Level Change, Switch Multilevel Stop Level Change, Switch Multilevel Set to associated nodes in Group 2 when the Smart Dimmer receives the Basic Set, Switch Multilevel Start Level Change, Switch Multilevel Stop Level Change, Switch Multilevel Set commands from main controller.

5.4 Association Group Info Command Class

5.4.1 Association Group Info Report Command Class

Profile: General: NA (Profile MSB=0, Profile LSB=0)

5.4.2 Association Group Name Report Command Class

Group 1: Lifeline

Group 2: Retransmit

5.5 Manufacturer Specific Report

Parameter	Value
Manufacturer ID 1	US/EU/AU=0x00 CN=0x01
Manufacturer ID 2	US/EU/AU=0x86 CN=0x6A
Product Type ID 1	EU=0x00, US=0x01, AU=0x02 CN=0x1D (29)
Product Type ID 2	0x03
Product ID 1	0x00
Product ID 2	0x63 (99)

5.6 Multilevel Switch Command Class

The Multilevel Switch CC is used to change the state/brightness level of output load.

5.7 Multi Channel Command Class

Multi Channel CC encapsulates the Multilevel Switch CC, Z-wave plus info CC, Association Group info CC, Association CC and supports 2 endpoints.

Multi Channel encapsulation Multilevel Switch CC of endpoint 1 is used to Set/Get the state of output load.

Multi Channel encapsulation Multilevel Switch CC of endpoint 2 is used to Set/Get the brightness level of RGB LED when it is in Night light mode.

5.8 Color Switch Command Class

Supported color component: Red (02), Green (03), Blue (04).

Color Switch Set is used to change the color of RGB Led only in Night light mode.

5.9 Configuration Set Command Class

7	6	5	4	3	2	1	0
Command Class = COMMAND_CLASS_CONFIGURATION							
Command = CONFIGURATION_SET							
Parameter Number							
Default	Reserved						Size
Configuration Value 1(MSB)							
Configuration Value 2							
.....							
Configuration Value n(LSB)							

Parameter Number Definitions (8 bit):

Parameter Number Hex / Decimal	Description	Default Value	Size
0x03 (3)	Current Overload Protection. Output Load will be turned off automatically when the Current overrun 2.6A and the time more than 2 minutes (0=disabled, 1=enabled).	0	1
0x14 (20)	Configure the output load status after re-power on (0=last status, 1=always on, 2=always off)	0	1
0x21 (33)	Set the RGB LED color value for testing. Value1: Reserved Value2: Red value Value3: Green value Value4: Blue value	-	4
0x50 (80)	Enable to send notifications to associated devices (Group 1) when the state of Smart Dimmer's load changed (0=nothing, 1=hail CC, 2=basic CC report).	0	1
0x51 (81)	Configure the state of LED when it is in 3 modes below: 0= Energy mode, the LED will follow the status (on/off) of its load. 1= Momentary indicate mode, when the state of Dimmer's load changed, The LED will follow the status (on/off) of its load, but the red LED will turn off after 5 seconds if there is no any switch action. 2= Night light mode.	0	1
0x53 (83)	Configure the RGB value when it is in Night light mode. Value1: Red color value Value2: Green color value Value3: Blue color value	Value1=0x1B Value2=0x14 Value3=0x1B	3
0x54 (84)	Configure the brightness level of RGB LED (0%-100%) when it is in Energy Mode/momentary indicate mode. Value1: green color value. Value2: yellow color value. Value3: red color value.	Green=50 Yellow=50 Red=50	3

0x5A (90)	Enables/disables parameter 91 and 92 below (1=enabled, 0=disabled).	0	1
0x5B (91)	The value here represents minimum change in wattage (in terms of wattage) for a REPORT to be sent (Valid values 0-60000).	25 (W)	2
0x5C (92)	The value here represents minimum change in wattage percent (in terms of percentage) for a REPORT to be sent (Valid values 0-100).	5 (%)	1
0x64 (100)	Set 101-103 to default.	N/A	1
0x65 (101)	Which reports need to send in Report group 1 (See flags in table below).	0x00 00 00 00	4
0x66 (102)	Which reports need to send in Report group 2 (See flags in table below).	0x00 00 00 00	4
0x67 (103)	Which reports need to send in Report group 3 (See flags in table below).	0x00 00 00 00	4
0x6E (110)	Set 111-113 to default.	N/A	1
0x6F (111)	The time interval of sending Report group 1 (Valid values 0x01-0x7FFFFFFF).	0x00 00 02 58	4
0x70 (112)	The time interval of sending Report group 2 (Valid values 0x01-0x7FFFFFFF).	0x00 00 02 58	4
0x71 (113)	The time interval of sending Report group 3 (Valid values 0x01-0x7FFFFFFF).	0x00 00 02 58	4
0xC8 (200)	Partner ID (0= Aeon Labs Standard Product, 1= others).	0	1
0xFC (252)	Enable/disable Configuration Locked (0 =disable, 1 = enable).	0	1
0xFE (254)	Device Tag.	0	2
0xFF (255)	1, Value=0x55555555、 Default=1、 Size=4 Reset to factory default setting and removed from the z-wave network	N/A	4
	2, Value=0、 Default=1、 Size=1 Reset to factory default setting	N/A	1

Configuration Values for parameter 101-103:

	7	6	5	4	3	2	1	0
configuration Value 1(MSB)	Reserved							
configuration Value 2	Reserved							
configuration Value 3	Reserved							

configuration Value 4(LSB)	Reserved	Reserved	Reserved	Reserved	Auto send Meter REPORT (for kWh) at the group time interval	Auto send Meter REPOR T (for watt) at the group time interval	Auto send Meter REPORT (for current) at the group time interval	Auto send Meter REPOR T (for voltage) at the group time interval
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Example:

a. Automatically report Meter CC (Watts) to node "1" every 12 minutes

1. Enable sending Meter CC (Watts) automatically in report group 1

```
ZW_SendData(0x70, 0x04, 0x65, 0x04, 0x00,0x00,0x00,0x04);
```

2. Set the interval of sending Meter CC (Watts) in report group 1

```
ZW_SendData(0x70, 0x04, 0x6F, 0x04, 0x00,0x00,0x02,0xd0);
```

3. Associate to node "1"

```
ZW_SendData(0x85, 0x01, 0x01, 0x01);
```

b. Set default values

```
ZW_SendData(0x70, 0x04, 0x255,0x01,0x00);
```