ZWN-333M

Wireless Home Automation Control Device

Plug-in Smart Meter Appliance Module
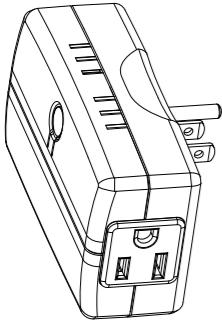
◆ **SPECIFICATIONS**

Voltage.. 120VAC, 60Hz
Incandescent...1000W
Ballast..1200VA
Resistive..1800W(15A)
Motor...1/3 HP
Z-Wave Frequency...908.42 MHz
Operating Temperature.. 32°F-104° F
Range..Up to 132 feet line of sight
between the Wireless Controller and the closest Z-Wave receiver module.

◆ **FEATURES**

● One Z-Wave controlled and one always-on AC outlet
● Provides manual/remote ON/OFF control of connected loads
● Interoperable with other Z-Wave enabled devices
● Measures energy usage of any connected appliance/device
● Acts as a Z-Wave repeater to extend the range of Z-Wave network
● Compatible with any incandescent, LED lamp and small electrical device

◆ **DESCRIPTION**

This ZWN-333M Smart Meter Appliance Module is a Z-Wave enabled device and fully interoperable with other Z-Wave certified device from other manufacturers and/or other applications, which can report wattage energy usage or kWh energy usage to a Z-Wave gateway. In a Z-Wave network, ZWN-333M can be controlled to turn on/off to save energy, also act as a wireless repeater regardless of vendor to increase reliability of the network. With a horizontal design, the Smart Meter Appliance Module will not block other nearby AC outlets.

◆ **MEASURE THE ENERGY USAGE**

The ZWN-333M Smart Meter Appliance Module enables you to measure the energy usage of your appliance. When added to a Z-Wave network, the Smart Meter Appliance Module reports real time data to your gateway or controller. It can display the accumulated consumption (in kWh) and actual power (in W) in the user interface of the gateway/remote. Please use the gateway installation manual for specific instructions on measuring the module.

WARNINGS AND CAUTIONS

To reduce the risk of electric shock, this product has a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type power outlet. If the plug does not fit into the outlet, connect a qualified electrician to install the proper outlet. Do not change the plug in any way.

To be installed and/or used in accordance with appropriate electrical codes and regulations. Exercise extreme caution when using Z-Wave devices to control appliances. Operation of the Z-Wave device may be in a different room than the controlled appliance, also an unintentional activation may occur if the wrong button on the remote is pressed. Z-Wave devices may automatically be powered on due to timed event programming.Depending upon the appliance, these unattended or unintentional operation could possibly result in a hazardous condition.

If you are unsure or uncomfortable about performing the installation, please consult a qualified electrician.

◆ **INSTALLATION**

1. Plug the ZWN-333M Smart Meter Appliance Module into wall receptacle.
2. Attach the desired appliance into the Z-Wave controlled outlet on ZWN-333M Smart Meter Appliance Module to control and measure the energy consumption.
3. Turn the knob/ program button on the lamp/ ZWN-333M module to ON position.

◆ **OPERATIONS**

Standard AC Outlet
Z-Wave Controlled Outlet
Blue LED indicator
Program Button
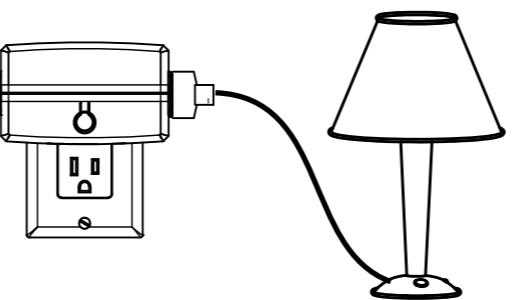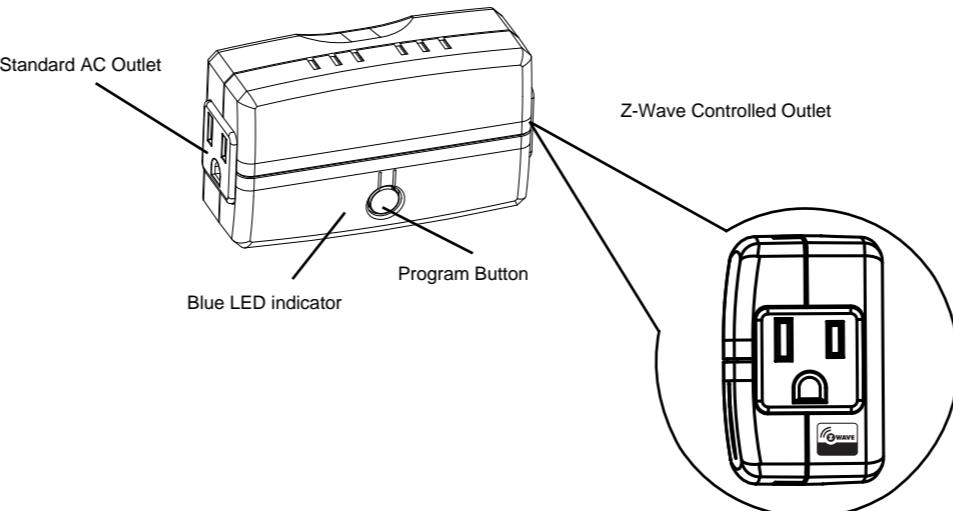
Manual Learning (Add / Remove)

The ZWN-333M can be added and removed from any Z-Wave network:

1. While the gateway/remote is in the add mode and the blue LED blinks on the ZWN-333M, press and hold the program button for 3 second on the module. The gateway/remote will verify the adding, assign a node ID number for the module and the LED will stop blinking on the module.

2. While the gateway/remote in the remove mode, press and hold the program button for 3 second on the ZWN-333M. The gateway/remote will verify the removing, remove the module from the current Z-Wave network, and the LED will blink on the module, when module power on.

Manual Control

The Program Button on the ZWN-333M Smart Meter Appliance Module allows the user to:

1. Manually turn ON the ZWN-333M Module: press and release the program button. The Blue LED indicator will turn OFF(default), and the appliance or device plugged into the ZWN-333M Module will turn ON.

2. Manually turn OFF the ZWN-333M Module: press and release the program button. The Blue LED indicator will turn ON(default), and the appliance or device plugged into the ZWN-333M Module will turn OFF.

3. Once program button is pressed and hold for 3 second, the device will enter into learn mode to accomplish adding or removing by controller. Refer to the instruction for your primary controller to access the setup function and add or remove devices.

4. Once program button is pressed and hold for 10 second, the device will send a device reset locally notification to controller. Then clear all of information for the network, and restore factory defaults, and reset the module. Use this procedure only in the event that the network primary controller is missing or otherwise inoperable.

Please Note:
After a power failure, the ZWN-333M switch module returned to the OFF state.

Advanced Operation
The following Advanced Operation parameters require that you have an advanced controller. However, basic remotes do not have this capability.

All On/All Off

Depending upon your primary controller, the ZWN-333M Module can be set to respond to ALL ON and ALL OFF commands in up to four different ways. Some controllers may not be able to change the response from its default setting. Please refer to your controller's instructions for information on whether or not it supports the configuration function and if so, how to change this setting.

The four possible responses are:

- It will respond to ALL-ON and the ALL-OFF command (default).
- It will not respond to ALL-ON or ALL-OFF commands.
- It will respond to the ALL-OFF command but will not respond to the ALL-ON command.
- It will respond to the ALL-ON command but will not respond to the ALL-OFF command.

Configuration

Parameter NO.	Size	Description	Valid Value	Default Value
1	1 Byte	synchronization of load power and LED indicator	0: Power on, LED off 1: Power on, LED on	Default=0

Association

Grouping ID	Max number of nodes	Description
1	1	Lifeline: Send device reset locally notification
2	5	StatusReport: Send basic report
3	5	PowerReport: Send meter power report

Restoring Factory Defaults

All Configuration Parameters can all be restored to their factory default settings by using your primary controller or manual reset control to reset the device.

Over-Current Protection

Additional over-current protection is provided by an internal fuse which is not user serviceable. Check your home's circuit breakers before concluding that the product must be replaced.

◆ WIRELESS RANGE

This device complies with the Z-Wave standard of open-air, line of sight transmission distances of 100 feet. Actual performance in a home depends on the numbers of walls between the remote controller and the destination device, the type of construction and the number of Z-Wave enabled devices installed in the control network.

Things to consider regarding RF range:

- Each wall or obstacle (i.e.:refrigerator, big screen TV, etc.)between the remote or a Z-Wave device and the destination device will reduce the maximum range by approximately 25-30%.

- Brick, tile or concrete walls block more of the RF signal than walls made of wooden studs and plasterboard (drywall).

- Wall mounted Z-Wave devices installed in metal junction boxes will suffer a significant loss of range (approximately 20%) since the metal box blocks a large part of the RF signal.

Effects of Home Construction on Wireless Range Between Z-Wave Enabled Devices.

Note:The distances shown in the table below are typical examples.Actual performance in your home will vary .

From the Remote (or repeating Z-Wave module) to destination device:				
Type of Construction		Wood Frame with Drywall		Brick, Tile or Concrete	
		Plastic J-Boxes*	Metal J-Boxes	Plastic J-Boxes*	Metal J-Boxes
Number of Walls or Obstacles	0**	132'	80'	132'	80'
	1	80'	56'	70'	48'
	2	49'	39'	36'	29'
	3	34'	27'	21'	17'

◆ FCC COMPLIANCE STATEMENT

The 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 uses, generates and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. 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.

Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

◆ WARRANTY INFORMATION

Our company warranties its products to be free of defects in materials and workmanship for a period of two (2) years. There are no obligations or liabilities on the part of our company for consequential damages arising out of, or in connection with, the use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation.

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