TZ69   Smart energy plug in switch

On/off knob
LED indicator
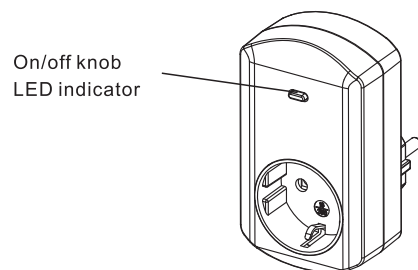
This plug-in ON/OFF switch TZ69 is a wireless switch, based on Z-Wave technology. Z-Wave™ enabled devices displaying the Z-Wave™ logo can also be used with it regardless of the manufacturer, and can also be used in other manufacturer's Z-Wave™ enabled networks. Remote On/Off control of the connected load is possible with other manufacturer's wireless Controller. Each switch is designed to act as a repeater. Repeaters will re-transmit the RF signal to ensure that the signal is received by its intended destination by routing the signal around obstacles and radio dead spots.

This plug-in ON/OFF switch is able to detect current wattage (5~3000W) and overload wattage (3010~3300W) of connected lights or appliances. When detecting overload state, the Switch will be disabled and its On/Off button will be lockout of which LED will flash quickly. However, unplug and re-connect the switch will reset its overload condition to normal status.

Adding to Z-Wave™ Network

In the front casing, there is an On/Off button with LED indicator which is used to toggle switch on and off or carry out inclusion, exclusion, reset or association. When first power is applied, its LED flashes on and off alternately and repeatedly at 2-second intervals. It implies that it has not been assigned a node ID and cannot work with Z-Wave enabled devices.

Auto Inclusion

The function of auto inclusion will be executed as long as the switch does not have Node ID and just plug the switch into a wall outlet.

Note: Auto inclusion timeout is 30 Seconds during which the node information of explorer frame will be emitted once every 5 seconds. Unlike "inclusion" function as shown in the table below, the execution of auto inclusion is free from pressing the On/Off button on the Switch.

The table below lists an operation summary of basic Z-Wave functions. Please refer to the instructions foryour Z-WaveTM Certificated Primary Controller to access the Setup function, and to include/exclude/associate devices

Function	Description	LED Indication
No node ID	The Z-Wave Controller does not allocate a node ID to the Switch.	1-second on, 1-second off
Add	1. Have Z-Wave Controller entered inclusion mode. 2. Pressing On/Off button three times within 1.5 seconds will enter inclusion mode.	Press On, for off Press Off, for on

Remove	1. Have Z-Wave Controller entered exclusion mode.	Press On, for off Press Off, for on
	2. Pressing On/Off button three times within 1.5 seconds will enter exclusion mode.	
	Node ID has been excluded.	1-second on, 1-second off
Reset	1. Pressing On/Off button three times within 1.5 seconds will enter inclusion mode.	Press On, for on Press Off, for off
	2. Within 3 second, press On/Off button again for 5 seconds until LED is off.	
	3. IDs are excluded.	1-second on, 1-second off
Association	1. Have Z-Wave Controller entered association mode. Or Pressing On/Off button three times within 1.5 seconds will enter association mode	Press On, for on Press Off, for off
	2. There are only one group for the switch (it can associate max five devices)	

※Including a node ID allocated by Z-Wave Controller means Add.   Excluding a node ID allocated by Z-Wave Controller means Remove.
※Failed or success in including/excluding the node ID can be viewed from the Z-Wave Controller.
※Association:it can be associated by Z-Wave devices with association
※Use the"Reset" procedure only in the event that the network primary controller is missing or otherwise inoperable
※The group identifier is "Group 1".
Association group info report command class
Profile:General lifeline (Profile MSB=0,Profile LSB=1)
Association group name report command class
Group 1:lifeline

LED Indication
To distinguish what mode the switch is in, view from the LED for identification.

State Type	LED Indication
Normal	Under normal operation, toggle On/Off button between On and Off. When pressing On, LED lights up, whereas Off, LED is off.
No node ID	Under normal operation, when the Switch has not been allocated a node ID, the LED flashes on and off alternately at 1-second intervals. By pressing On/Off button, it will stop flashing temporarily. However, after unplugging and reconnecting the Switch, the LED will flash on and off alternately at 1-second intervals.
Overload	When overload state occurs, the Switch is disabled of which LED flashes on and off alternately at 0.5 second intervals. Overload state can be cleared by unplugging and reconnecting the Switch to the wall outlet.

Choosing a Suitable Location
1.Do not locate the Switch facing direct sunlight, humid or dusty place.
2.The suitable ambient temperature for the Switch is 0°C~40°C.
3.Do not locate the Switch where exists combustible substances or any source of heat, e.g. fires, radiators, boiler etc.
4.After putting it into use, the body of Switch will become a little bit hot of which phenomenon is normal.

Installation
1.Plug this On/Off Switch into a wall outlet near the load to be controlled.
2.Plug the load into the Switch. Make sure the load to be controlled cannot exceed 2990(UK)/3000 watts.
3.Press the button or switch on the load to the ON position.
4.To manually turn ON the Switch, press and release the On/Off button. The LED will turn ON, and the load plugged into the Switch will also turn ON.

5. To manually turn OFF the Switch, simply press and release the On/Off button. The LED will turn OFF and the load plugged into the Switch will also turn OFF.

Z-Waves Configuration

Configuration Parameter	Function	Size (Byte)	Value	Unit	Default	Description
1	Change the state of indicator light	1	0-1		0	
2	Memory function	1	0-1		0	
3	Watt Meter Report Period	2	0x01-0x7FFF	5s	720	5*720s=3600s=1 hour
4	KWH Meter Report Period	2	0x01-0x7FFF	10min	6	6*10min= 1 hour
6	Threshold of Watt for Load Caution	2	10-3000	1Watt	3000	
5	Threshold of KWH for Load Caution	2	1-10000	Kwh	10000	

watt Meter Report Period:
   If the setting is configured for 1hour (set value =720), the TZ69 will report its instant power consumption every 1 hour to Z-Wave Controller. The maximum interval to report its instant power consumption is 45 hours (5s*32767/3600=45hr).

KWH Meter Report Period:
   If the setting is configured for 1hour (set value =6), the TZ69 will report its Accumulated Power Consumption (KW/h) every 1 hour to Z-Wave Controller. The maximum interval to report its Accumulated Power Consumption (KW/h) is 227.55 days (10min*32767/1440=227.55 days).
Threshold of Watt for Load Caution:
   In the above form, when the value is 3000, if Relay1 load by below 3000 watt turned into more than 3000 watt, will immediately send the instantaneous load w value to Group 1. The maximum set scope is 3000 watt, minimum scale value of 10 watt, the Default value is 3000 watt.
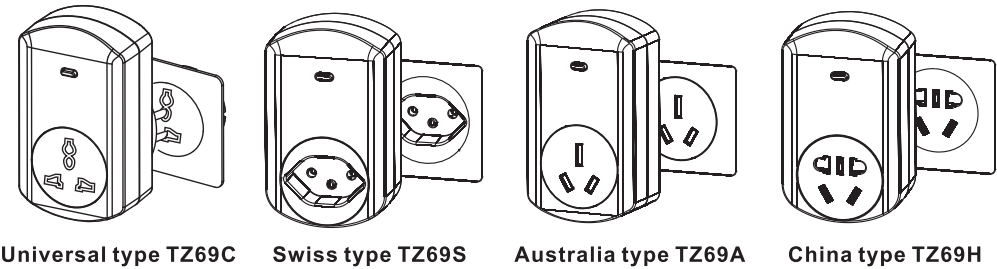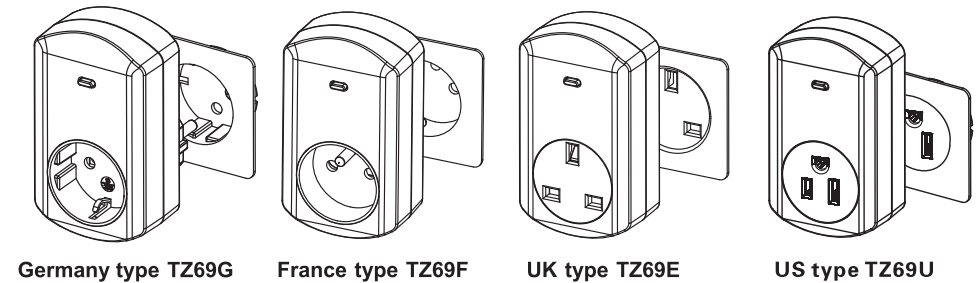**Threshold of KWH for Load Caution:**
   In the above form, when the value of 10000, when the accumulation of Relay1 consumed power more than 10000 KWH, will immediately send the accumulation of current consumed power to Group1. Maximum can set range to 10000 KWH, minimum scale value is 1 KWH, the Default value is 10000 KWH.
Memory function:
   Stated in the above form, TZ69 by default value is 0, when the value is 0, TZ69 memory function not open; When the value is 1, open TZ69 memory function.
Change the state of indicator light:
   Stated in the above form, the default value is 0, when the value of TZ69 is 0, socket LED indicator will be ON when the light status is "ON"; When set to 1, the socket LED indicator will be OFF when the light status is "ON".

Socket Type

Since the socket type for each country in Europe varies, refer to the outline for each socket suited for each country as follows:

Germany type TZ69G   **France type TZ69F**   **UK type TZ69E**   **US type TZ69U**

Universal type TZ69C   **Swiss type TZ69S**   **Australia type TZ69A**   **China type TZ69H**

Note: Please make sure that the intensity of the plug of the electrical device must be 16A and have same head as the enclosed plug before inserting to the socket.

Troubleshooting

Symptom	Cause of Failure	Recommendation
The Switch not working and LED off	1.The Switch is not plugged into the electrical outlet properly 2.The Switch break down	1.Check power connections 2. Don't open up the Switch and send it for repair.
The Switch LED illuminating, but cannot control the ON/OFF Switch of the load attached	Check if the load plugged into the Switch has its own ON/OFF switch	Set the ON/OFF switch of the load attached to ON
The Switch LED illuminating, but the Detector cannot control the Switch	1. Not carry out association 2. Same frequency interference	1. Carry out association 2. Wait for a while to re-try
LED keep flashing, but cannot control	Overload occurs	Remove the load attached or check max. load cannot exceed 3010W~3300W

Specification

Operating Voltage	110V~230V 50Hz/60Hz
Maximum Load	2990W for UK, 3000W for Germany, and France,1500W for USA
Range	Minimum 40 m in door 70m outdoor line of sight
Operating Temperature	0°C ~ 40°C
Frequency Range	868.42 MHz,908.42MHz

Specifications are subject to change and improvement without notice.

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.
If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new once, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.