



# CHERUBINI

## A510083-A510084-A510090 META DOUBLE SWITCH 7



Attuatore con due uscite 230V indipendenti **IT**

Actuator with two independent 230V outputs **EN**

Aktor mit zwei unabhängigen 230V-Ausgängen **DE**

Actionneur avec 2 sorties 230V indépendantes **FR**

Actuador dos salidas 230V independientes **ES**



ISTRUZIONI - INSTRUCTIONS - EINSTELLANLEITUNGEN  
INSTRUCTIONS - INSTRUCCIONES



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**EU declaration of conformity**

CHERUBINI S.p.A. declares that the product is in conformity with the relevant Union harmonisation legislation: Directive 2014/53/EU, Directive 2011/65/EU.

The full text of the EU declaration of conformity is available upon request at the following website: [www.cherubini.it](http://www.cherubini.it).

Failure to comply with these instructions annuls CHERUBINI's responsibilities and guarantee.



The crossed-out wheellie bin symbol indicates that the product must be collected separately from other waste at the end of its useful life. Therefore, users should deliver this product to appropriate waste collection points or return it to their dealers at the end of its service life. See your local authority's regulations.

Adequate waste sorting for subsequent processing and environmentally compatible disposal helps to avoid possible negative effects on the environment and public health and promotes reuse and/or recycling of the materials used to make the equipment.

## DEVICE DESCRIPTION

META Double Switch 7 is an ON/OFF control device designed to independently control two separate loads, suited for being controlled by both remote and local switches. Similarly to the other META Serie 7 devices, it can be fully integrated into pre-existing systems and configured to associate configurable behaviors to a specific number of clicks, in full integration with the Z-Wave™ home automation ecosystem.

There are two versions of META Double Switch 7:

L version - controlled by Line signal;

N version - controlled by Neutral signal.

Each of the device versions indicated above can be supplied without meter functionalities.

Each of its two channels features an integrated consumption measurement device.

META Double Switch 7 also boasts the lowest energy consumption on the market.

It is very easy to install and works with both momentary and toggle switch. At the same time, it is completely configurable so that it can adapt to the most varied needs while also being ready to be used without needing additional configurations in order to operate.

The device is equipped with contact protection technology (Zero Crossing) which reduces the electrical stress on the relay contacts and ensures a longer life. The open / closed switching of the device always occur when the instantaneous value of voltage is 0.

It operates in any Z-Wave™ network with other Z-Wave™/Z-Wave Plus™ certified devices and controllers from any other manufacturer. As a constantly powered node, the device will act as repeater regardless of the vendor in order to increase the reliability of the network.

This device is a security enabled Z-Wave Plus™ product that is able to use encrypted Z-Wave Plus™ messages to communicate to other security enabled Z-Wave Plus™ products.

This device must be used in conjunction with a Security Enabled Z-Wave™ Controller in order to fully utilize all implemented functions.

Integrated Button  
With LED indicator





Integrated Button	1 or 3 clicks to enter in Learn Mode 6 clicks to reset the system to manufacturer's settings 2 clicks to enter in setup mode
Power Supply	1 – Null 6 – Line
Input Switch	2 – Input 2 Line signal/Null signal in version L/N 3 – Input 1 Line signal/Null signal in version L/N
Output	4 – Output 2 Line referred to Null 5 – Output 1 Line referred to Null


## TECHNICAL SPECIFICATIONS


Power supply	110 - 230 VAC $\pm$ 10% 50/60 Hz
Maximum Load on Relay	>24 VDC
System temperature limitation	105 °C
Work temperature	From -10° to 40° C
Power consumption	< 260 mW in standby < 480 mW with working load < 700 mW with working load
Radio frequency	868,4 MHz
Maximum transmitted power	5 dBm
Protection system	S2 Security
Maximum distance	Up to 100 m outdoor Up to 40 m indoor
Dimensions	37x37x17 mm
Actuator element	Relay
Compliance	CE, RoHs
Electrical IP Rating	IP20


## SAFETY INFORMATION


 **INFO:** The device is designed to be installed in flush mounting junction boxes or close to the load to be controlled.


 **WARNING:** The device must be installed by electricians qualified to intervene on electrical systems in compliance with safety requirements set out by the regulations in force.

 **DANGER:** The device must be connected with a voltage of 230 VAC, before carrying out any operation, please make sure the power main switch is in OFF position.

 **DANGER:** Any procedure requiring the use of the Integrated Button is related only to the installation phase and is to be considered a service procedure that must be performed by qualified personnel. This operation must be performed with all necessary precautions for operating in areas with a single level of insulation.

 **WARNING:** Do not connect loads that exceed the maximum load permitted by the actuator element.

 **WARNING:** All connections must be performed according to the electrical diagrams provided.

 **WARNING:** The device must be installed in norm-compliant systems suitably protected from overloads and short circuits.

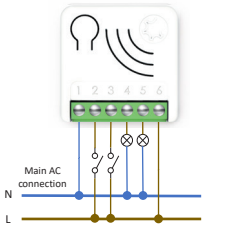
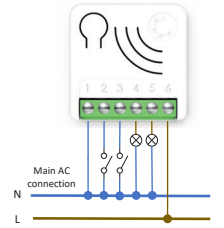
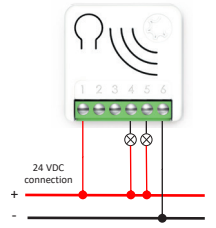
# ELECTRICAL CONNECTIONS DIAGRAM

The device must be supplied by phase and neutral.

There are two versions of META Double Switch 7 available, in order that you can choose the most suitable for your electrical system:

- Version N: used in systems that require to be controlled by Neutral signal
- Version L: used in systems that require to be controlled by Line signal
- Both version N and version L can be connected in a VDC system.


Connections must be made according to one of the diagrams below.

Version L	Version N	VDC usage
 <p>Power Supply: 1 - Neutral, 6 - Line; Output Loads: 5 - O1, 4 - O2; Input switches: 3 - I1, 2 - I2</p>	 <p>Power Supply: 1 - Neutral, 6 - Line; Output Loads: 5 - O1, 4 - O2; Input switches: 3 - I1, 2 - I2</p>	 <p>Power Supply: 1 - 24VDC+, 6 - VDC-; Output Loads: 5 - O1, 4 - O2; Input switches: Non supported</p>

**WARNING:** The line must be properly protected from overloads and short circuits related to a possible failure of the loads connected to the output O1 and O2.

## DEVICE INSTALLATION

- 1) Make sure the main switch is set to the OFF position
- 2) Connect the device based on the diagrams provided
- 3) Turn the main switch to the ON position
- 4) Include the device in the Z-Wave™ network

 **TIP:** The antenna must not be shortened, removed or modified. To ensure maximum efficiency, it must be installed as shown. Large size metal equipment near the antenna can negatively affect reception. Each device is a node in a mesh network. If there are metal obstacles, the obstacle can often be overcome with a further triangulation node.



## LED STATUS INDICATOR

The system includes an RGB LED that shows the device's status during installation:

**Solid RED:** the device is not included in any network

**Solid BLUE:** the device is Offline setup mode

**4 GREEN blinks then OFF:** the device has been just added to a Z-Wave™ network in S2 Authenticate Mode

**4 BLUE blinks then OFF:** the device has been just added to a Z-Wave™ network in S2 Unauthenticated Mode

**4 RED blinks then OFF:** the device has been just added to a Z-Wave™ network without security

**Sequence of GREEN-BLUE** Learn Mode for inclusion

**Sequence of RED-BLUE** Learn Mode for exclusion

**Rapid sequence of GREEN-BLUE-RED:** the event on the input (external switch) is not valid.



**TIP:** To test if the electrical connections are correct, before the inclusion of the device, while pressing **n** times the external switch, the RGB LED should flash **green** for the same amount of times. If it does not, check the wire connections.



## ADD/REMOVE THE DEVICE INTO A Z-WAVE™ NETWORK (*classic*)

### Standard Inclusion (add)

All META Serie 7 devices are compatible with all Z-Wave™/Z-Wave Plus™ certified controllers. The devices support both the **Network Wide Inclusion** mechanism (which offers the ability to be included in a network, even if the device is not directly connected to the controller) and **Normal Inclusion**.

By default, the inclusion procedure starts in **Normal Inclusion** mode and after a short timeout the procedure continues in **Network Wide Inclusion** mode that lasts for about 20 Seconds.

Only a controller can add the device into the network. After activating the inclusion function by the controller, the device can be added by setting it in Learn Mode.

Before including the device, the LED status indicator is solid RED. The adding of a device is executed by activating the adding procedure in the inclusion section of the controller interface and then executing 1 or 3 click on the integrated button. As soon as the inclusion procedure initiates the LED indicator starts a sequence of GREEN-BLUE blinks. The device is included in the network when the LED status is OFF and the interview is completed.

### Standard exclusion (remove)

Only a controller can remove the device from the network. After activating the exclusion function by the controller, the device can be removed by setting it in **Learn Mode**.

The procedure of exclusion can be activated by **Removing** a node from the Z-Wave™ network and executing 1 or 3 click on the integrated button; as soon as the exclusion initiates, the LED indicator starts a sequence of RED-BLUE blinks. The device is excluded from the network when the LED status indicator is solid RED and the App\_status in the interface is OK.

## SMARTSTART INCLUSION

Z-Wave™ SmartStart aims to shift the tasks related to inclusion of an end device into a Z-Wave™ network away from the end device itself, and towards the more user-friendly interface of the gateway.

Z-Wave™ SmartStart removes the need for initiating the end device to start inclusion. Inclusion is initiated automatically on power-ON and repeated at dynamic intervals for as long as the device is not included into a Z-Wave™ network. As the new device announces itself on power-ON, the protocol will provide notifications, and the gateway can initiate the inclusion process in the background, without the need for user interaction or any interruption of normal operation. The SmartStart inclusion process only includes authenticated devices.

META Serie 7 devices can be added into a Z-Wave™ network by scanning the Z-Wave™ QR Code present on the product with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity.

The SmartStart QR and the full DSK string code can be found on the back of the device. The PIN is the first group of 5 digits printed underlined. If you plan to use the DSK, it is important that you take a picture of the label and keep it in a safe place.



## S2 SECURE INCLUSION

When adding META Serie 7 devices to a Z-Wave™ network with a controller supporting Security 2 Authenticated (S2), the PIN code of the Z-Wave™ Device Specific Key (DSK) is required. The unique DSK code is printed on the product label. The first five digits of the key are highlighted and underlined to help the user identify the PIN code.



## SUPPORTED COMMAND CLASSES

Command Class	Version	Non-Secure CC	Secure CC
BASIC	2		X
ZWAVEPLUS_INFO	2	X	
ASSOCIATION	2		X
MULTI_CHANNEL_ASSOCIATION	3		X
ASSOCIATION_GRP_INFO	3		X
TRANSPORT_SERVICE	2	X	
VERSION	3		X
MANUFACTURER_SPECIFIC	2		X
DEVICE_RESET_LOCALLY	1		X
INDICATOR	3		X
POWERLEVEL	1		X
SECURITY_2	1	X	
SUPERVISION	1	X	
FIRMWARE_UPDATE_MD	5		X
APPLICATION_STATUS	1	X	
CONFIGURATION_V4	4		X
SWITCH_BINARY	2		X
CENTRAL_SCENE	3		X
METER	5		X

## Supporting Command Class Basic

The basic command classes are mapped into the Switch Binary Command Class.

Basic Command received	Mapped Command (Binary Switch)
Basic Set (0xFF)	Switch Binary Set (0xFF)
Basic Set (0x00)	Switch Binary Set (0x00)
Basic GET	Basic Report 0x00 if the Binary Switch is in OFF state 0x00 Basic Report 0xFF if the Binary Switch is in ON state 0xFF

## Supporting Command Class Indicator

The device supports the Command Class Indicator V3 (ID 0x50). When the device receives an indicator set, the led blinks accordingly to the Indicator set received.

The color shown by the indicator will be:

**RED:** if the device is included without Security

**BLUE:** if the device is included in S2 Unauthenticated Mode

**GREEN:** if the device is already included in S2 Authenticated Mode.

## Meter Command Class

The product supports the meter command class and KWh is the default scale report send when the scale type is not present in the received Get.

Supported Scale Name	Scale Value
Watt	2
KWh	0

## DEVICE CONTROL

META Double Switch 7 can control two separate loads by using an external switch for each channel, or from remote through a controller.

### Controlling the device by External Switches

For the operation of the device within the Z-Wave™ network and controlling the loads connected to the device, control actions are performed on the switches.



The **CONTROL ACTIONS** are **EVENTS** executed on **EXTERNAL SWITCHES** connected to the terminal of the device which can be *Clicks, Hold Down and Up*.

Event	Type of switch	Actions on the switch
Click	Momentary switch (button)	Press briefly & Release <i>(when pressed it autonomously returns to the initial position)</i>
	Toggle Switch (bistabile)	Press & Release <i>(a single click means one single flip of the switch)</i>
MultiClick= <b>n</b> click	Momentary switch	Sequence of consecutive <b>n</b> clicks
	Toggle Switch	
Hold Down	Momentary switch	Press longer than click. <i>After a Hold Down always follows an UP event.</i>
Up	Momentary switch	Release. <i>The event applies only if there has been a previous Hold Down event.</i>

Since the device supports Central Scene Notification all the events described in the table will be notified with a Central Scene Notification Report to the Lifeline. The events that trigger a Central Scene Notification Report can be customized with the configuration parameter in the Central Scene Notification Parameter section.

### Controlling the device by a Z-Wave™ controller

The device can be controlled by any Z-Wave™ / Z-Wave Plus™ certified controller available in the market.

## ASSOCIATIONS

META Double Switch 7 can control other devices of both traditional and multi-channel type. It can also control other devices such as relays or dimmers. The device supports 7 association groups, each of which supports the association of up to 8 devices (nodes):

**Lifeline Group:** Nodes belonging to this group will receive: notifications about device reset; changes related to the relay status and meter reports.

**Groups from 2 to 7:** Nodes belonging to these groups will be controlled by a basic set if the external switch receives one or more clicks.

Group ID	Group Name	N° max nodes	Description	Command sent	End Point ID
1	Lifeline	8	Lifeline Group. Nodes belonging to this group will receive: notifications about device reset; changes related to the relay and Indicator Status and the Central Scene Notification.	DEVICE_RESET_LOCALLY_NOTIFICATION SWITCH_BINARY_REPORT METER_REPORT CENTRAL_SCENE_NOTIFICATION INDICATOR_REPORT	0
2	Follow ch1 state	8	The state of the output 1 (ON/OFF) will be propagated to the associated device	BASIC_SET	1
3	clicks on button 1 G1	8	The associated device will be controlled based on the click events and output propagation defined by configuration parameters on the Association group management section		1
4	clicks on button 1 G2	8			1
5	Follow ch2 state	8	The state of the output 2 (ON/OFF) will be propagated to the associated device		2
6	clicks on button 2 G1	8	The associated device will be controlled based on the click events and output propagation defined by configuration parameters on the Association group management section		2
7	clicks on button 2 G2	8			2

 **INFO:** Association ensures direct transfer of control commands between devices and is performed without participation of the main controller.

## SPECIAL FEATURES

### Timer Management

An independent timer for each channel can be set when switching On and/or Off. It also possible to define which event will start the timer (for example only the change on the output due to double clicks).

### Power consumption management

META Double Switch 7 is equipped with a very precise power metering functionality, therefore you can easily monitor the instantaneous power and cumulated energy for each channel.

## OFFLINE SETUP MODE

The device has a unique feature that allows to configure some parameters without using any user interface. This feature enables the professional user to setup the main features of the device in the field even if the device is not included in a Z-Wave™ Network. When the device will be included in the network all these configuration parameters will be maintained.

To enter in offline setup mode, operate 2 clicks on the integrated button.

When the device is in Offline setup mode the led becomes solid Blue and the following configurations are permitted:

1 click	Setup input type to toggle switch. Equivalent to set parameter n. 1 to 2.
2 clicks	Activate a switch Off timer of 10 minutes. Equivalent to set parameter n.30 to 15 and parameter n. 31 to 6000.
3 clicks	Activate a switch Off timer of 5 minutes. Equivalent to set parameter n. 30 to 15 and parameter n. 31 to 3000.
After receiving the command the led blinks a number of times equal to the number of clicks recognized.	
6 clicks	Exit from Offline setup mode and return to normal operation.
Hold down for 5 seconds	Reset all configuration parameters to their default value and return to normal operation.

After entering in Offline setup mode, the device returns to normal operation if no action on the switch is detected for more than 20 Seconds.

## RESET TO THE FACTORY SETTINGS

The device can be reset to the original factory with 6 consecutive clicks on the integrated button.

After the reset is completed, the device will reboot and a RED solid led is showed. Please use this procedure only when the network primary controller is missing or otherwise inoperable.



**INFO:** If the reset is performed while the device is still part of a network, it notifies the other devices that it has been removed (*Device Reset Locally Notification*).

## FIRMWARE UPDATE

The system supports over-the-air firmware updates that do not require the device to be removed from its location. The firmware update can be activated from all certified controllers supporting version 2 of the Firmware Update function.



**WARNING:** The system will be rebooted at the end of the firmware update procedure. It is advisable to carry out the firmware update procedure only when necessary and following careful planning of the intervention.



# CONFIGURATIONS

## Input Configuration

Parameter Number	Size	Parameter Name	Default Value	Description
1	1	IN1_TYPE	1	Define the 1 <sup>st</sup> input type
Parameters Values			Min: 0	Max: 2
Value	Description			
0	No switch input			
1	Momentary switch (button)			
2	Toggle switch			

Parameter Number	Size	Parameter Name	Default Value	Description
2	1	IN2_TYPE	1	Define the 2 <sup>nd</sup> input type
Parameters Values			Min: 0	Max: 2
Value	Description			
0	No switch input			
1	Momentary switch (button)			
2	Toggle switch			

Parameter Number	Size	Parameter Name	Default Value	Description
10	1	IN1_TOGGLE	15	Define which events on the input 1 toggle output 1.
<b>Parameters Values</b>			<b>Min: 0</b>	<b>Max: 31</b>
Value	Description			
0	Disabled			
1	1 click			
2	2 clicks			
4	3 clicks			
8	Hold down			
16	Up			
<p>If you support more than 1 event, the value for the configuration parameter is the sum of the event values.</p> <p>For example:</p> <p>1 click and 2 clicks -&gt; Parameter value must be <math>1 + 2 = 3</math></p> <p>1 click and 3 clicks -&gt; Parameter value must be <math>1 + 4 = 5</math></p> <p><b>Default Value: 1 click, 2 clicks, 3 clicks, Hold down →15.</b></p>				

Parameter Number	Size	Parameter Name	Default Value	Description
11	1	IN1_ON_EXCLUSION	0	Define which events on the input 1 do not switch-On output 1.

<b>Parameters Values</b>			<b>Min: 0</b>	<b>Max: 31</b>
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Value	Description
0	Disable
1	1 click
2	2 clicks
4	3 clicks
8	Hold down
16	Up

If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:

1 click and 2 clicks -> Parameter value must be  $1 + 2 = 3$

1 click and 3 clicks -> Parameter value must be  $1 + 4 = 5$

**Default Value: Disable →0**

Parameter Number	Size	Parameter Name	Default Value	Description
12	1	IN1_OFF_EXCLUSION	0	Define which events on the input 1 do not switch-Off output 1.

<b>Parameters Values</b>			<b>Min: 0</b>	<b>Max: 31</b>
--------------------------	--	--	---------------	----------------

Value	Description
0	Disable
1	1 click
2	2 clicks
4	3 clicks
8	Hold down
16	Up

If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:

1 click and 2 clicks -> Parameter value must be  $1 + 2 = 3$

1 click and 3 clicks -> Parameter value must be  $1 + 4 = 5$

**Default Value: Disable →0**

Parameter Number	Size	Parameter Name	Default Value	Description
15	1	IN2_TOGGLE	15	Define which events on the input 2 toggle output 2.

Parameters Values Min: 0 Max: 31

Value	Description
0	Disable
1	1 click
2	2 clicks
4	3 clicks
8	Hold down
16	Up

If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:

1 click and 2 clicks -> Parameter value must be  $1 + 2 = 3$

1 click and 3 clicks -> Parameter value must be  $1 + 4 = 5$

**Default Value: 1 click, 2 clicks, 3 clicks, Hold down →15**

Parameter Number	Size	Parameter Name	Default Value	Description
16	1	IN2_ON_EXCLUSION	0	Define which events on the input 2 do not switch-On output 2.

Parameters Values Min: 0 Max: 31

Value	Description
0	Disable
1	1 click
2	2 clicks
4	3 clicks
8	Hold down
16	Up

If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:

1 click and 2 clicks -> Parameter value must be  $1 + 2 = 3$

1 click and 3 clicks -> Parameter value must be  $1 + 4 = 5$

**Default Value: Disable →0**

Parameter Number	Size	Parameter Name	Default Value	Description
17	1	IN2_OFF_EXCLUSION	0	Define which events on the input 2 do not switch-Off output 2.

**Parameters Values** **Min: 0** **Max: 31**

Value	Description
0	Disable
1	1 click
2	2 clicks
4	3 clicks
8	Hold down
16	Up

If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:

1 click and 2 clicks -> Parameter value must be  $1 + 2 = 3$

1 click and 3 clicks -> Parameter value must be  $1 + 4 = 5$

**Default Value: Disable → 0**

#### Output Configuration:

Parameter Number	Size	Parameter Name	Default Value	Description
21	1	OUT1_TYPE	0	Define the 1 <sup>st</sup> output type.

**Parameters Values** **Min: 0** **Max: 1**

Value	Description
0	Direct load or normally Open relay
1	Normally Closed relay

Parameter Number	Size	Parameter Name	Default Value	Description
22	1	OUT2_TYPE	0	Define the 2 <sup>nd</sup> output type.

**Parameters Values** **Min: 0** **Max: 1**

Value	Description
0	Direct load or normally Open relay
1	Normally Closed relay

Parameter Number	Size	Parameter Name	Default Value	Description
23	1	STARTUP_OUT1	2	Define the 1 <sup>st</sup> output level on startup ( <i>status of the device following a restart</i> )
Parameters Values			Min: 0	Max: 3
Value	Description			
0	OFF			
1	ON			
2	Previous status			
3	equal to input (ON if input close, OFF if input open)			

Parameter Number	Size	Parameter Name	Default Value	Description
24	1	STARTUP_OUT2	2	Define the 2 <sup>nd</sup> output level on startup ( <i>status of the device following a restart</i> )
Parameters Values			Min: 0	Max: 3
Value	Description			
0	OFF			
1	ON			
2	Previous status			
3	equal to input (ON if input close, OFF if input open)			

Parameter Number	Size	Parameter Name	Default Value	Description
25	1	LOCAL_SCENE	0	Define the Local scene configuration.
Parameters Values			Min: 0	Max: 2
Value	Description			
0	independent channel ( <i>External switch I1 controls output 1 load and external switch I2 controls output 2 load</i> )			
1	never both on ( <i>Both outputs can be OFF but they can never be ON simultaneously</i> )			
2	Sequencing ( <i>Outputs are toggled in this order: both loads ON, only load 1 ON, only load 2 ON, both loads OFF</i> )			

## Timer management

Parameter Number	Size	Parameter Name	Default Value	Description
30	1	TIMER_CH1_SETUP	0	Define which trigger event on the Channel 1 activate its timers when output 1 has changed
<b>Parameters Values</b>			<b>Min: 0</b>	<b>Max: 127</b>
Value	Description			
0	Disabled			
1	1 click			
2	2 clicks			
4	3 clicks			
8	Hold down			
16	Up			
32	Network (status change trigger by gateway or other devices in the Z-Wave network).			
64	System (based on the startup status, or other timer event).			
<p>If more than 1 event are supported, the value for the configuration parameter is the sum of the event values.                      For example: To control the load with 1 click and 2 clicks -&gt; Parameter value must be <math>1 + 2 = 3</math>  <b>Default value: Disabled →0</b></p>				

Parameter Number	Size	Parameter Name	Default Value	Description
31	4	OFF_EP1_TIMEOUT	0	Time in tenth of seconds after which the output on Channel 1 will be switched Off.
<b>Parameters Values</b>			<b>Min: 0</b>	<b>Max: 360000</b>
Value	Description			
0-360000	Specific time expressed in tenth of seconds for Status change.			

Parameter Number	Size	Parameter Name	Default Value	Description
32	4	ON_EP1_TIMEOUT	0	Time in tenth of seconds after which the output on Channel 1 will be switched On
Parameters Values			Min: 0	Max: 360000
Value	Description			
0-360000	Specific time expressed in tenth of seconds for Status change.			

Parameter Number	Size	Parameter Name	Default Value	Description
33	1	TIMER_CH2_SETUP	0	Define which trigger events on the Channel 2 activate its timers when output 2 has changed
Parameters Values			Min: 0	Max: 127
Value	Description			
0	Disabled			
1	1 click			
2	2 clicks			
4	3 clicks			
8	Hold down			
16	Up			
32	Network (status change trigger by gateway or other devices in the Z-Wave™ network)			
64	System (based on the startup status, or other timer event)			
<p>If you support more than 1 event, the value for the configuration parameter is the sum of the event values.            For example: To control the load with            1 click and 2 clicks -&gt; Parameter value must be <math>1 + 2 = 3</math>  <b>Default Value: Disabled →0</b></p>				



Parameter Number	Size	Parameter Name	Default Value	Description
34	4	OFF_EP2_TIMEOUT	0	Time in tenth of seconds after which the output on Channel 2 will be switched Off
Parameters Values			Min: 0	Max: 360000
Value	Description			
0-360000	Specific time expressed in tenth of seconds for Status change.			

Parameter Number	Size	Parameter Name	Default Value	Description
35	4	ON_EP2_TIMEOUT	0	Time in tenth of seconds after which the output on Channel 2 will be switched On
Parameters Values			Min: 0	Max: 360000
Value	Description			
0-360000	Specific time expressed in tenth of seconds for Status change.			

### Association group management

Parameter Number	Size	Parameter Name	Default Value	Description
40	1	G1_EP1_SETUP	1	Define which events on the input 1 control G1 association group on Channel 1.
Parameters Values			Min: 0	Max: 31
Value	Description			
0	No control			
1	1 click			
2	2 clicks			
4	3 clicks			
8	Hold down			
16	Up			

If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:

1 click and 2 clicks -> Parameter value must be  $1 + 2 = 3$

1 click and 3 clicks -> Parameter value must be  $1 + 4 = 5$

**Default value: 1 click → 1**

Parameter Number	Size	Parameter Name	Default Value	Description
41	1	G2_EP1_SETUP	2	Define which events on the input 1 control G2 association group on Channel 1.
Parameters Values			Min: 0	Max: 31
Value	Description			
0	No control			
1	1 click			
2	2 clicks			
4	3 clicks			
8	Hold down			
16	Up			
<p>If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:            1 click and 2 clicks -&gt; Parameter value must be <math>1 + 2 = 3</math>            1 click and 3 clicks -&gt; Parameter value must be <math>1 + 4 = 5</math>  <b>Default value: 2 clicks →2</b></p>				

Parameter Number	Size	Parameter Name	Default Value	Description
42	1	G1_EP2_SETUP	1	Define which events on the input 2 control G1 association group on Channel 2.
Parameters Values			Min: 0	Max: 31
Value	Description			
0	No control			
1	1 click			
2	2 clicks			
4	3 clicks			
8	Hold down			
16	Up			
<p>If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:            1 click and 2 clicks -&gt; Parameter value must be <math>1 + 2 = 3</math>            1 click and 3 clicks -&gt; Parameter value must be <math>1 + 4 = 5</math>  <b>Default value: 1 click →1</b></p>				

Parameter Number	Size	Parameter Name	Default Value	Description
43	1	G2_EP2_SETUP	2	Define which events on the input 2 control G2 association group on Channel 2.
<b>Parameters Values</b>			<b>Min: 0</b>	<b>Max: 31</b>
Value	Description			
0	No control			
1	1 click			
2	2 clicks			
4	3 clicks			
8	Hold down			
16	Up			
<p>If you support more than 1 event, the value for the configuration parameter is the sum of the event values. For example:            1 click and 2 clicks -&gt; Parameter value must be <math>1 + 2 = 3</math>            1 click and 3 clicks -&gt; Parameter value must be <math>1 + 4 = 5</math>  <b>Default value: 2 clicks →2</b></p>				

Parameter Number	Size	Parameter Name	Default Value	Description
44	1	G1_EP1_ASS_VALUE	101	The value used to control G1 association group on Channel 1.
<b>Parameters Values</b>			<b>Min: 0</b>	<b>Max: 102</b>
Value	Description			
0-99	Specific value			
100	ON			
101	Propagate ( <i>output 1 status to the associated device</i> )			
102	Toggle remote ( <i>change status ON/OFF of associated devices</i> )			

Parameter Number	Size	Parameter Name	Default Value	Description
45	1	G2_EP1_ASS_VALUE	101	The value used to control G2 association group on Channel 1.
Parameters Values			Min: 0	Max: 102
Value	Description			
0-99	Specific value			
100	ON			
101	Propagate ( <i>output 1 status to the associated device</i> )			
102	Toggle remote ( <i>change status ON/OFF of associated devices</i> )			

Parameter Number	Size	Parameter Name	Default Value	Description
46	1	G1_EP2_ASS_VALUE	101	The value used to control G1 association group on Channel 2.
Parameters Values			Min: 0	Max: 102
Value	Description			
0-99	Specific value			
100	ON			
101	Propagate ( <i>output 2 status to the associated device</i> )			
102	Toggle remote ( <i>change status ON/OFF of associated devices</i> )			

Parameter Number	Size	Parameter Name	Default Value	Description
47	1	G2_EP2_ASS_VALUE	101	The value used to control G2 association group on Channel 2.
Parameters Values			Min: 0	Max: 102
Value	Description			
0-99	Specific value			
100	ON			
101	Propagate ( <i>output 2 status to the associated device</i> )			
102	Toggle remote ( <i>change status ON/OFF of associated devices</i> )			

## Central Scene management

Parameter Number	Size	Parameter Name	Default Value	Description
60	1	SCENE_SETUP	31	Define which event on the input trigger a central scene notification.
<b>Parameters Values</b>			<b>Min: 0</b>	<b>Max: 31</b>
Value	Description			
0	None			
1	1 click			
2	2 clicks			
4	3 clicks			
8	Hold down			
16	Up			
<p>If more than 1 event are supported, the value for the configuration parameter is the sum of the event values.                      For example:                      1 click and 2 clicks -&gt; Parameter value must be <math>1 + 2 = 3</math>                      1 click and 3 clicks -&gt; Parameter value must be <math>1 + 4 = 5</math>  <b>Default value: all event →31</b></p>				

## Meter management (only valid for the version without meter functionalities)

Parameter Number	Size	Parameter Name	Default Value	Description
70	1	E_REPORT_DELAY	10	Time in minutes after which the next Energy report will be sent
Parameters Values			Min: 1	Max: 120
Value	Description			
1-120	Report generation in a specific time in minutes			

Parameter Number	Size	Parameter Name	Default Value	Description
71	1	W_REPORT_DELAY	10	Time in minutes after which the next Energy report will be sent
Parameters Values			Min: 1	Max: 120
Value	Description			
1-120	Report generation in a specific time in minutes			

Parameter Number	Size	Parameter Name	Default Value	Description
75	1	W_INSTANT_REPORT	30	The percentage change from the last sent report that trigger a new Power report
Parameters Values			Min: 0	Max: 100
Value	Description			
0	No report is sent (for any power change)			
1-100	The percentage of Power change from the last sent report that triggers a new meter report sequence			



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