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**MClimate
16ASPM 16A
Switch and
Power Meter**

MClimate 16ASPM 16A Switch and Power Meter User Manual

Contents

M Climate

MClimate 16ASPM 16A Switch and Power Meter

Product Usage Instructions

Device Parts and Functions
The device features LED indicators and a button for operation. Refer to the manual for detailed descriptions of LED states and button functions.

Commissioning
Follow the step-by-step guide in the manual to commission the device properly, including joining the LoRaWAN network and setting up necessary configurations.

Placement Guidelines and Installation
Ensure proper placement of the device as per the guidelines provided. Use the wiring diagram for correct installation connecting it to the electricity meter and the appliance.

Scan the QR Code to access MClimate 16A Switch & Power Meter LoRaWAN® extended documentation

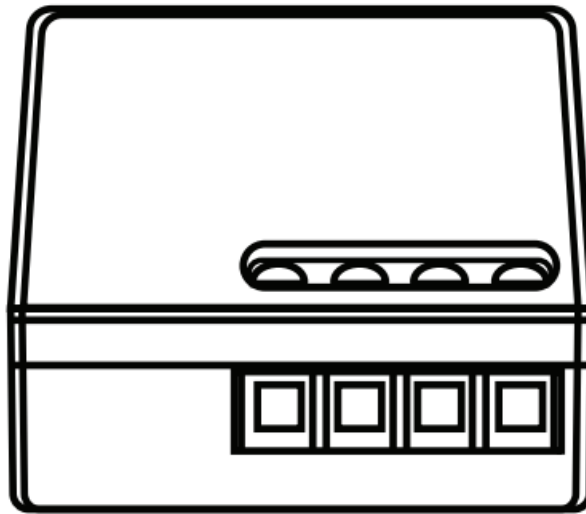**mclimate.eu/lorawan-resources**

Need some help?
For more product information and issues related to it, visit: **mclimate.eu/lorawan-resources** or write us to: **lorawan-support@mclimate.eu**

- 00359 800 3 1010
- Monday-Friday 09:00 – 18:00

- Sofia, Bulgaria
- Sofia Tech Park,
- labs building, floor 1

What's inside the box?

MClimate 16A Switch & Power Meter LoRaWAN®

Technical specifications

- Description: The MClimate 16A Switch & Power Meter LoRaWAN is a miniature device that features a wet 16A relay and an electricity meter inside. The device is small enough to fit behind most wall switches and outlets. The device has 4 terminals L, N, N, Lout, connecting and disconnecting Lout from L. The device operates in LoRaWAN Class C, features FUOTA (Firmware Upgrades Over The Air) and has overheating protection.
- Model: MC-LW-16ASPM-01
- Dimensions: 32 x 36 x 18mm
- Weight: 24.5gr
- Enclosure: PC UL-94 V0
- Frequency range: 863÷870MHz (others available on demand)
- LoRaWAN® Device type: Class C End-device Power supply: 100-240VAC / 24-30VDC
- Operating temperature: 0°C to +40°C
- Operating humidity: 0-80% RH (non-condensing)

Environmental conditions, in which the device is intended to operate:

- Indoor using;
- for altitude up to 2000m;
- for an ambient temperature: 0°C to +40°C;
- for maximum relative humidity of 80% for temperature up to 31°C, decreasing linearly to 25% relative humidity at temperature 50°C;
- for environment with a degree of contamination 2 (PD2).

Storage and transportation conditions:

- for an ambient temperature: -40°C to +85°C;
- for relative humidity 5% to 90% without condensation

Manufacturer
MClimate Jsc, 1784 Sofia, Sofia Tech Park, Labs Building, 111J Tsarigradsko Shose Compliance with the WEEE Directive The appliance marked with this symbol should not be disposed of with other household waste. It must be handed over to the relevant collection point for the recycling of electrical and electronic equipment.

Safety Instructions

Please read the safety instructions before installing the device! Failure to follow the recommended instructions in this manual may be dangerous or in violation of the law. The manufacturer MClimate Jsc., is not responsible for any loss or damage caused by failure to follow the instructions in the operating manual.

Legal Notices
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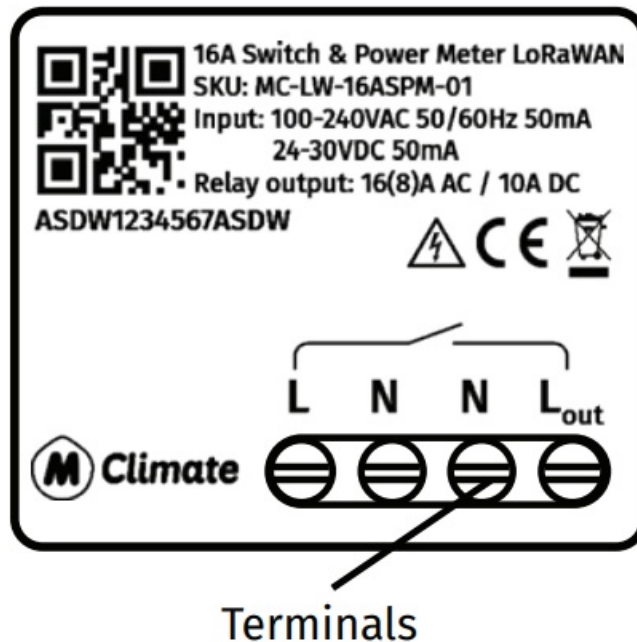
EU Declaration of Conformity

This device complies with the essential requirements and other applicable provisions of the following EU directives:

- 2014/35/EU (LVD)
- EN62368-1:2020
- EN61010-1:2010
- 2014/53/EU (RED)
- EN300220-1
- EN300220-2
- 2014/30/EU (EMC)
- 2014/30/EU (EMC)
- EN301489-1
- EN301489-17
- EN55032:2015
- EN55035:2017

Compatibility
In order to operate MClimate 16A Switch & Power MeterLoRaWAN®, you will need: LoRaWAN® network

Device parts, LED status and button
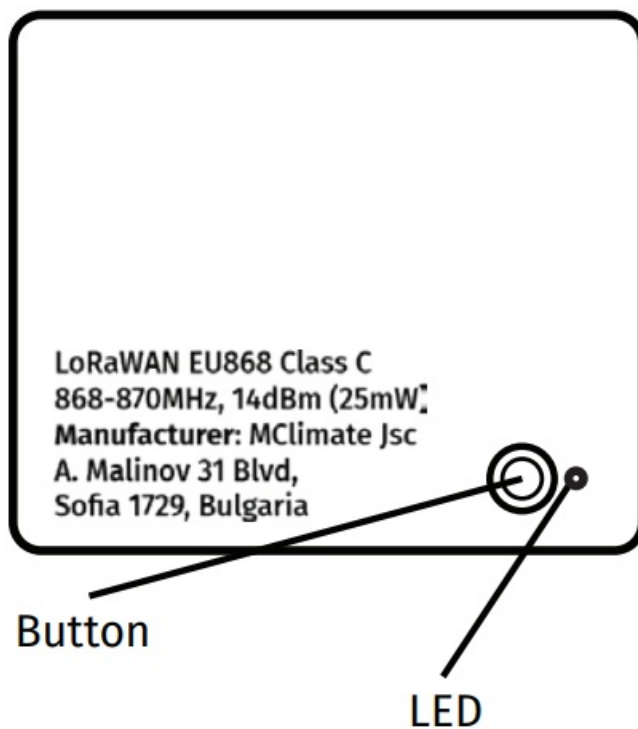
Terminals

LED

State Meaning

- 2s ON, 1s OFF Device is powering up.
- 1s ON, 1s OFF Device is trying to join the LoRaWAN
- Network. Solid ON Device has successfully joined the LoRaWAN network.
- 1/4s ON, 1/4s OFF Joining the LoRaWAN network has failed.
- 2s OFF, 2s ON, 2s OFF Alarm activated – overcurrent, overpower, overheating or overvoltage protection activated. Once alarm is indicated, the device shows joined/not joined status for 5s and continues indicating the alarm.

BUTTON

State Meaning

- 2 quick presses Switch relay state
- LED: 1s OFF, 1s ON, 1s OFF – relay closed
- LED: 1/2s OFF, 1/2s ON, 1/2s OFF, 1/2s ON
- relay opened
- After relay status indication, LED continues to show the joined/not joined status as described above.
- 10s press Restart the device, trigger new join-request, preserve the status of the relay.

LoRaWAN EU868 Class C
868-870MHz, 14dBm (25mW)
Manufacturer: MClimate Jsc
A. Malinov 31 Blvd,
Sofia 1729, Bulgaria
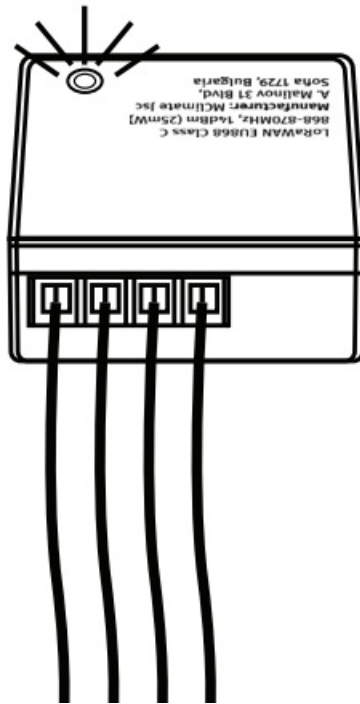
Button

LED

Commissioning

1. Open your LoRaWAN® Network provider access panel and add the device using the supplied Serial Number, DevEUI, AppEUI (JoinEUI) and AppKey.

Device ID: 9X7

DevEUI: 70B3D25D

AppEUI: 70B3D25

AppKey: A0658DFAE7213

Register

The data is example. Do not use.

2. Continue the Installation with the instructions of your LoRaWAN® Network provider.

You can get DevEUI, AppEUI (JoinEUI) & AppKey information from the LoRaWAN® credentials .csv file we sent you with the fulfillment confirmation.

Wiring diagram

Wire the device as per the Wiring Diagram below. It is a representation of the device as seen from the side where the terminals are exposed.

Start-up behavior

Once you have wired the device and provided power to the terminals the device will start up and try to Join the LoRaWAN network.

Placement Guidelines and Installation

- The device is intended for installation in console boxes, panels and in places that provide an insulating shell of at least 5mm to cover current-carrying parts or other conductive parts.
- The device must be mounted to non-conductive surfaces!
- The device must be installed in a place that ensures good cooling.
- Install vertically for improved cooling.
- To be used only as a control device and not as a protection device!

 WE are make any building smart.

www.mclimate.eu
Designed & Manufactured by MClimate in Europe. last update: 30.08.2024

FAQ

- **What should I do if the device shows an alarm indication?**

  If the device indicates an alarm (overcurrent, overpower, overheating, or overvoltage), take necessary precautions and investigate the cause of the alarm. Contact customer support if needed.
- **How can I restart the device?**

  To restart the device, press and hold the button for 10 seconds. This action will trigger a new join-request and preserve the status of the relay.
- **Where can I find more product information or get support?**

  For a ditional product information or support, visit **mclimate.eu/lorawan-resources** or contact **lorawan-support@mclimate.eu**. You can also reach out to customer support at 00359 800 3 1010 during business hours.

Documents / Resources

MClimate 16ASPM 16A Switch and Power Meter [pdf] User Manual
16ASPM 16A Switch and Power Meter, 16ASPM, 16A Switch and Power Meter, Switch and Power Meter, Power Meter

References

- **LoRaWAN Resources | MClimate**
- **MClimate | MClimate - We make any building smart**
- **User Manual**