

16A Switch & Power Meter LoRaWAN®

User manual



**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

Bulgarian

За да разберете как се
инсталира MClimate
16A Switch & Power
Meter LoRaWAN®,
сканирайте QR кода
или посетете линка до
него.

Spanish

Para saber cómo
instalar MClimate 16A
Switch & Power Meter
LoRaWAN®, escanee el
código QR o visite el
enlace al lado.

Swedish

För att ta reda på hur du
installerar MClimate 16A
Switch & Power Meter
LoRaWAN®, skanna
QR-koden eller besök
länken bredvid den.

Czech

Chcete-li zjistit, jak
nainstalovat MClimate
16A Switch & Power
Meter LoRaWAN®,
prohlédněte si kód QR
nebo navštivte odkaz
vedle něj.

Italian

Per installare MClimate
16A Switch & Power
Meter LoRaWAN®
scannerizzare il codice
QR oppure aprire il
link al suo lato.

Finnish

Tutustu MClimate 16A
Switch & Power Meter
LoRaWAN®-laitteen
asentamiseen, skanna
QR-koodi tai vieraila
sen vieressä olevassa
linkissä.



00359 800 3 1010

Monday-Friday 09:00 - 18:00



Sofia, Bulgaria

Sofia Tech Park,
labs building, floor 1

German

Um herauszufinden, wie man MClimate 16A Switch & Power Meter LoRaWAN® installiert, scannen Sie den QR-Code oder besuchen Sie den Link daneben.

French

Pour savoir comment installer MClimate H16A Switch & Power Meter LoRaWAN®, scannez le code QR ou visitez le lien à côté de celui-ci.

Dutch

Om te weten te komen hoe u MClimate 16A Switch & Power Meter LoRaWAN® installeert, scan de QR-code of bezoek de link ernaast.

Polish

Aby dowiedzieć się, jak zainstalować MClimate 16A Switch & Power Meter LoRaWAN®, zeskanuj kod QR lub odwiedź link obok niego.

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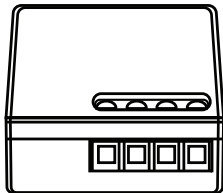
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What's inside the box?



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

All information, including but not limited to, features, functionality, and / or other product specifications are subject to change without notice. MClimate retains all rights to review or update its products, software or documentation without being required to notify any natural or legal person.

The MClimate and MClimate logo are trademarks of MClimate Jsc. All other brands and product names mentioned herein are trademarks of their respective owners.

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



Button

LED

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.

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: 1X7627H65

DevEUI: 70101C2501030000E1

AppEUI: 701630250103000000

AppKey: 40668DFAE72375AFT047A8B37E

Register



The data is example.
Do not use.

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

SECURITY LoRaWAN® 01177

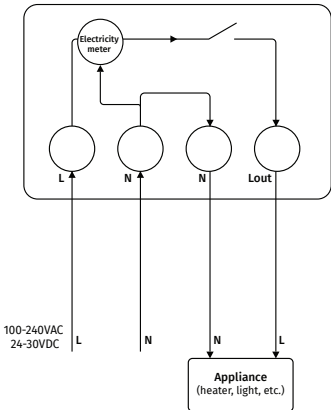
Serial Number	DevEUI	AppEUI	AppKey
0000000000000000	0000000000000000	0000000000000000	00000000000000000000000000000000



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

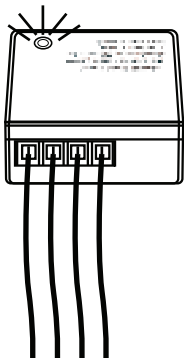
Wiring diagram

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
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building
smart.

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Designed & Manufactured by MClimate in Europe.

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