

16A Dry Switch LoRaWAN® User manual

Scan the QR Code to access MClimate 16A Dry Switch LoRaWAN® extended documentation



mclimate.eu/lorawan-resources

Need some help?

For more product information
and issues related to it, visit:
[mclimate.eu/lorawan-resources](mailto:lorawan-support@mclimate.eu)
or write us to:
lorawan-support@mclimate.eu

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

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

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

00359 800 3 1010
Monday-Friday 09:00 - 18:00
Sofia, Bulgaria
Sofia Tech Park,
labs building, floor 1

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

Italian
Per installare
MClimate 16A Dry
Switch LoRaWAN®,
scannerizzare il codice
QR oppure aprire il link
al suo lato.

Finnish
Tutustu MClimate 16A
Dry Switch
LoRaWAN®-laitteen
asentamiseen,
skannaa QR-koodi tai
vieraila sen vieressä
olevassa linkissä.

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

French
Pour savoir comment
installer MClimate 16A Dry
Switch LoRaWAN®,
scannez le code QR ou
visitez le lien à côté de
celui-ci.

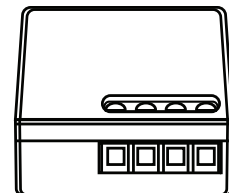
Dutch
Om te weten te komen hoe
u MClimate 16A Dry Switch
LoRaWAN® installeert, scan
de QR-code of bezoek de
link ernaast.

Polish
Aby dowiedzieć się, jak
zainstalować MClimate 16A
Dry Switch LoRaWAN®,
zescanuj kod QR lub
odwiedź link obok niego.

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What's inside the box?



MClimate 16A Dry Switch
LoRaWAN®

Technical specifications

Description: The MClimate 16A Dry Switch
LoRaWAN is a miniature device that features a dry
16A relay. The device is small enough to fit behind
most wall switches and outlets. The device has 4
terminals L, N, I, O, connecting and disconnecting
I from O. The device operates in LoRaWAN Class C,
features FUOTA (Firmware Upgrades Over The Air)
and has overheating protection.
Model: MC-LW-16ADS-01
Dimensions: 32mm x 36mm x 18mm
Weight: 24.5gr
Enclosure: ABS
Frequency range: 863-870MHz
(others available on demand)
LoRaWAN® Device type: Class C End-device
Power supply: 100-240VAC / 24-30VDC
Work temperature: 0°C to +40°C
Working 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 +60°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 (P02).

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, 111 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

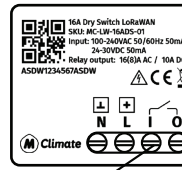
This device complies with the essential
requirements and other applicable provisions
of the following EU directives:

2014/35/EU (LVD)
EN62368-1:2020
2014/53/EU (RED)
EN300200-1
EN300200-2
2014/30/EU (EMC)
EN55032:2015
EN55035:2017

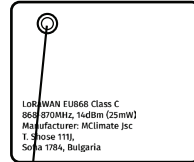
Compatibility
In order to operate MClimate 16A Dry Switch
LoRaWAN®, you will need:
LoRaWAN® network



Device parts and button



Terminals



Button, LED
Holding the button for 10
seconds restarts the device.

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: 9X7

DevEUI: 70B3D25D

AppEUI: 70B3D25

AppKey: A0658DFAE7213

Register

▲ The data is example.
Do not use.

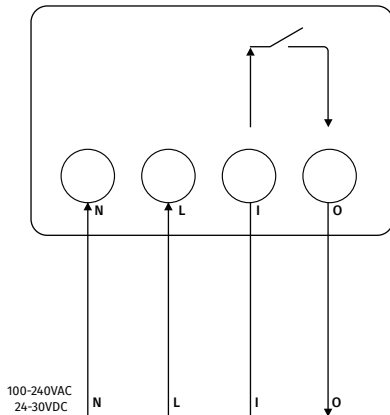
2 Continue the Installation with the instructions of
your LoRaWAN® Network provider.

MClimate_LoRaWAN_51177			
Serial Number	DevEui	AppEui	AppKey
QWERTYUIOPASDFGHJKL	70B3D25D	70B3D25	5f6c31

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

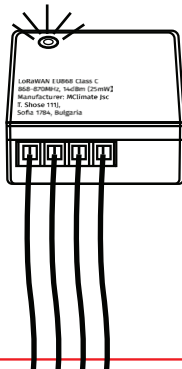
Wiring diagram

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 (indicated by a
single blink of the button/LED).



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!

