LoRaWAN®

MClimate Multipurpose Button LoRaWAN®

User manual

Scan the QR Code to access MClimate Multipurpose Button LoRaWAN® extended documentation

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Bulgarian

За да разберете как се инсталира MClimate Multipurpose Button LoRaWAN®, сканирайте QR кода или посетете линка до него.

Czech

Chcete-li zjistit, jak nainstalovat MClimate Multipurpose Button LoRaWAN®, prohlédněte si kód QR nebo navštivte odkaz vedle něj.

Italian

Per installare MClimate Multipurpose Button LoRaWAN® scannerizzare il codice QR oppure aprire il link al suo lato.

Polish

Aby dowiedzieć się, jak zainstalować MClimate Multipurpose Button LoRaWAN®, zeskanuj kod QR lub odwiedź link obok niego.

Swedish

För att ta reda på hur du installerar MClimate Multipurpose Button LoRaWAN®, skanna QR-koden eller besök länken bredvid den.

Finnish

Tutustu MClimate Multipurpose Button LoRaWAN®-laitteen asentamiseen, skannaa QR-koodi tai vieraile sen vieressä olevassa linkissä.

German

Um herauszufinden, wie man MClimate Multipurpose Button LoRaWAN® installiert, scannen Sie den QR-Code oder besuchen Sie den Link daneben.

French

Pour savoir comment installer MClimate Multipurpose Button LoRaWAN®, scannez le code QR ou visitez le lien à côté de celui-ci.

Dutch

Om te weten te komen hoe u MClimate Multipurpose Button LoRaWAN® installeert, scan de QR-code of bezoek de link ernaast.

Spanish

Para saber cómo instalar MClimate Multipurpose Button LoRaWAN®, escanee el código QR o visite el enlace al lado.

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Table of content

What's inside the box?

MClimate Multipurpose
Button LoRaWAN®
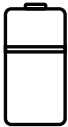
ER10280 3VDC
battery

Technical specifications

Description: LoRaWAN Button with temperature sensor and 3 types of button presses (single, double and triple press)
Created by MClimate
Model: MC-LW-BTN-01
Dimensions: 71 x 41 x 18mm
Weight: 26gr
Frequency range: 863÷870MHz
Power supply: 1xER10280 3VDC battery
Sensors: built-in temperature sensor
Work temperature: 0°C to +50°C
Material: ABS

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 an installation 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, 1729 Sofia 31, Alexander Malinov Blvd, Building 2, Floor 2

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:

2014/53/EC, EN 50491-3:2009
EEU 300 220-1 V3.1.1:2017
EN 60950-1:2006+A11:2009 +A1:2010+A12:2011+
A2:2013 + AC:2015
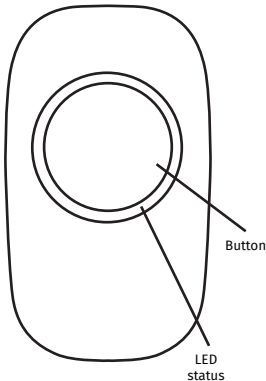EEU 300 220-2 V3.1.1:2017, EN 301 489-1 V2.1.1:2017

Compatibility
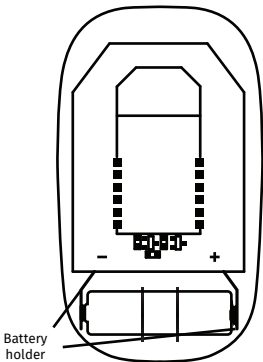**In order to operate MClimate Multipurpose Button LoRaWAN®, you will need:**
LoRaWAN® network

CE

Device parts

Button

LED status

Assembled MClimate Multipurpose
Button LoRaWAN®, top view

Battery holder

Disassembled MClimate Multipurpose
Button LoRaWAN®, bottom view

LED, Buttons and behaviour

There are three separate types of clicks supported by the button. After each click the button waits for 600ms to check if another click is coming. Once the click type has been determined, the device sends a confirmed uplink with the temperature data and the click type information. Supported click types:
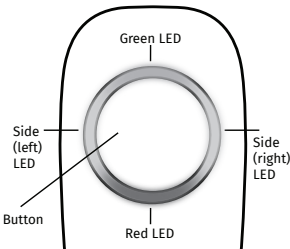
1 Single click

2 Double click

3 Triple click

Green LED

Side
(left)
LED

Side
(right)
LED

Button

Red LED

LEDs indications:

- The GREEN LED is activated while the button is pressed
- The side LEDs alternate when the LoRaWAN message is being sent
- The GREEN LED lights up when the uplink is sent and acknowledged by the gateway and LNS
- If the message has not been successfully acknowledged, the RED LED activates
- If a message is not allowed to be sent at the moment (due to RF duty-cycle restrictions), the RED light activates after you release the button.
- If the sensor is NOT connected to a network, then the SIDE and RED LEDs activate.

Commissioning

⚠️ Before you install the device, we highly recommend that you first commission it on your LNS. Once the battery paper isolator is removed, the device will initiate a LoRaWAN Join Procedure on SF12. Please, make sure you enable ADR in your LNS and/or mark the device as static. The lower the spreading factor, the better the performance of the energy storage will be.

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░░░░░░1
AppEUI:	70B3D25░░░░░░░░
AppKey:	A0658DFAE7213░░░░░░░░░

Register

⚠️ The data is example. Do not use.

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2 Continue the Installation with the instructions of your LoRaWAN® Network provider.
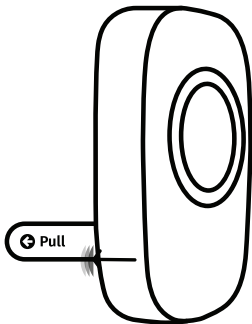
MClimate_LoRaWAN_51177

Serial Number	DevEui	AppEui	AppKey
GN█████████████	70B█████████	70BC████████	5fc3█████████████████

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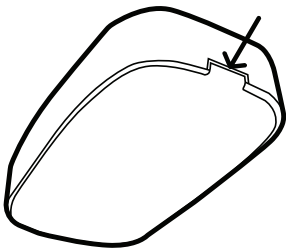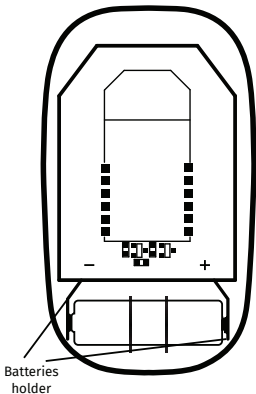
Commissioning

Remove the battery paper isolator from the device.

Pull

Open the device
If you need to open the device to replace the battery, use the slot indicated in the picture to open the device. Insert the new battery following the direction indicated on the PCB.
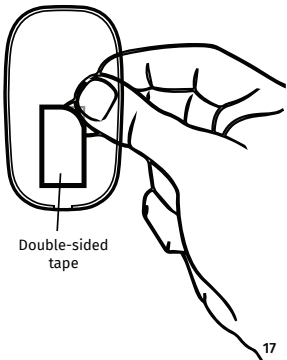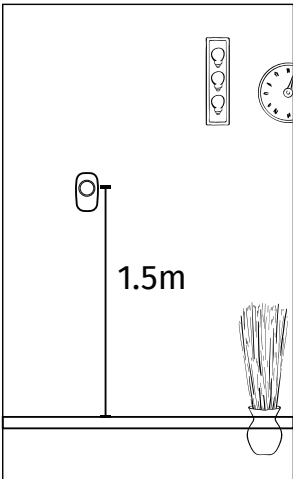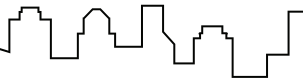
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Batteries
holder

Disassembled MClimate Multipurpose
Button LoRaWAN®, top view

Installation

We recommend installing the device in an open environment (e.g. not in a recess) at 1.5m height. Do not install the device near big metal items as it will worsen the RF performance. Use double-sided tape to attach it to the surface.

Double-sided tape

1.5m

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Designed & Manufactured by
MClimate in Europe.