MClimate H&T Sensor LoRaWAN®

User manual

Scan the QR Code to access MClimate H&T Sensor LoRaWAN® extended documentation

Bulgarian
За да разберете как се инсталира MClimate H&T Sensor LoRaWAN®, сканирайте QR кода или посетете линка до него.

Czech
Chcete-li zjistit, jak nainstalovat MClimate H&T Sensor LoRaWAN®, prohlédněte si kód QR nebo navštivte odkaz vedle něj.

Finnish
Tutustu MClimate H&T Sensor LoRaWAN®-laitteen asentamiseen, skannaa QR-koodi tai vierailla sen vieressä olevassa linkissä.

Danish
For at finde ud af, hvordan du installerer MClimate H&T Sensor LoRaWAN®, scan QR-koden eller besøg linket ud for det.

Italian
Per installare MClimate H&T Sensor LoRaWAN® scannerizzare il codice QR oppure aprire il link al suo lato.

German
Um herauszufinden, wie man MClimate H&T Sensor LoRaWAN® installiert, scannen Sie den QR-Code oder besuchen Sie den Link

Latvian
Lai uzzinātu, kā instalēt MClimate H&T Sensor LoRaWAN®, skenēt QR kodu vai apmeklējiet saiti blakus tai.

Spanish
Para saber cómo instalar MClimate H&T Sensor LoRaWAN®, escanee el código QR o visite el enlace al lado.

Dutch
Om te weten te komen hoe u MClimate H&T Sensor LoRaWAN® installeert, scan de QR-code of bezoek de link ernaast.

Hungarian
A MClimate H&T Sensor LoRaWAN® telepítésének kiderítéséhez keresse meg a QR-kódot, vagy keresse fel a mellette található linket.

Irish
Chun a fháil amach conas a shuiteáil MClimate H&T Sensor LoRaWAN®, scanadh an cód QR nó tabhair cuairt ar an nasc in aice leis é.

French
Pour savoir comment installer MClimate H&T Sensor LoRaWAN®, scannez le code QR ou visitez le lien à côté de celui-ci.

Estonian
Et teada saada, kuidas installida MClimate H&T Sensor LoRaWAN®, QR-koodi või külastada linki kõrval.

Swedish
För att ta reda på hur du installerar MClimate H&T Sensor LoRaWAN®, skanna QR-koden eller besök länken bredvid den.

Portuguese
Para saber como instalar MClimate H&T Sensor LoRaWAN®, digitalize o código QR ou visite o link ao lado dele.

Maltese
Biex issir taf kif jinstallaw MClimate H&T Sensor LoRaWAN®, skennjati l-kodiċi QR jew żur il-link li jmiss lilu.

Romanian
Pentru a afla cum să instalați MClimate H&T Sensor LoRaWAN®, scanați codul QR sau accesați link-ul de lângă acesta.

Slovak
Ak chcete zistiť, ako nainštalovať MClimate H&T Sensor LoRaWAN®, skenujte kód QR alebo navštívte odkaz vedľa nej.

Russian
Чтобы узнать, как установить MClimate H&T Sensor LoRaWAN®, отсканируйте QR-код или перейдите по ссылке, расположенной рядом с ним.

Lithuanian
Norėdami sužinoti, kaip jdiegti MClimate H&T Sensor LoRaWAN®, nuskaitykite QR kodą arba apsilankykite nuorodą šalia jo.

Polish
Aby dowiedzieć się, jak zainstalować MClimate H&T Sensor LoRaWAN®, zeskanuj kod QR lub odwiedź link obok niego.

Greek
Για να μάθετε πως να εγκαταστήσετε τον MClimate H&T Sensor LoRaWAN®, σκανάρετε τον QR κωδικό ή επισκεφτείτε τον σύνδεσμο δίπλα του.

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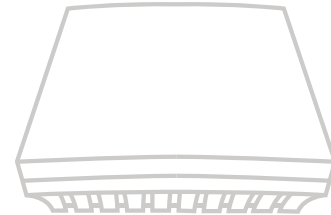
00359 800 3 1010
Monday-Friday 09:00 - 18:00

Sofia, Bulgaria
Aleksandar Malinov Boulevard 31, Campus X, Building 2, floor 1, office 1-2

Table of content

What's inside the box?

MClimate H&T Sensor LoRaWAN®

Technical specifications

Description: LoRaWAN temperature and humidity sensor
Model: MC-HT02
Dimensions: 80 x 80 x 20mm
Weight: 107gr
Frequency range: 863÷870MHz
LoRaWAN® Device type: Class A End-device
Power supply: 2xAA batteries 1,5VDC
Sensors: built-in temperature and humidity sensor
Work temperature: 0°C to +60°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 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
Melissa Climate Jsc
Gen. Gurko 4 street
1000 Sofia,Bulgaria

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 Melissa Climate 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.

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

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

Compatibility

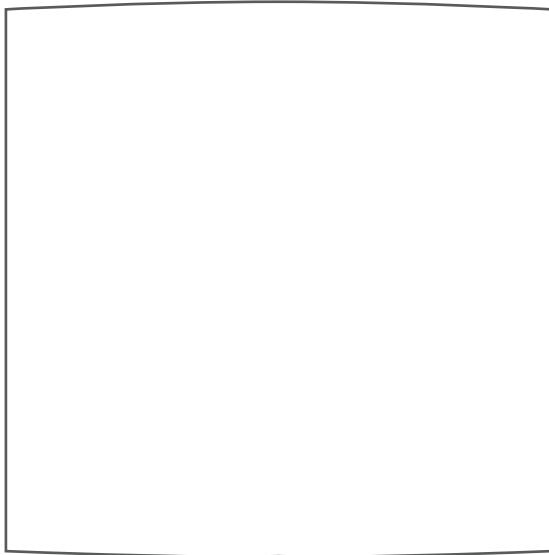**In order to operate MCllimate H&T Sensor LoRaWAN®, you will need:**
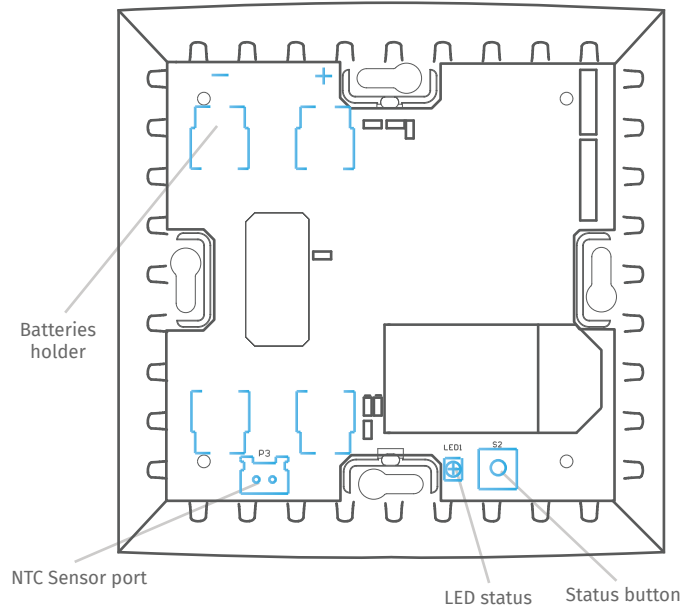LoRaWAN® network
Battery

Battery type: 2xAA battery 1,5VDC
Device operating voltage: 2.7 - 3.6VDC

Device parts
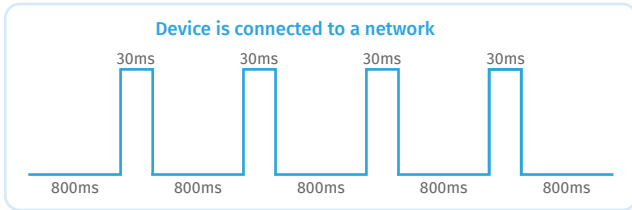

Assembled H&T Sensor, top view

Batteries holder

NTC Sensor port

LED status

Status button

Disassembled H&T Sensor, top view

LED, Buttons and behaviour

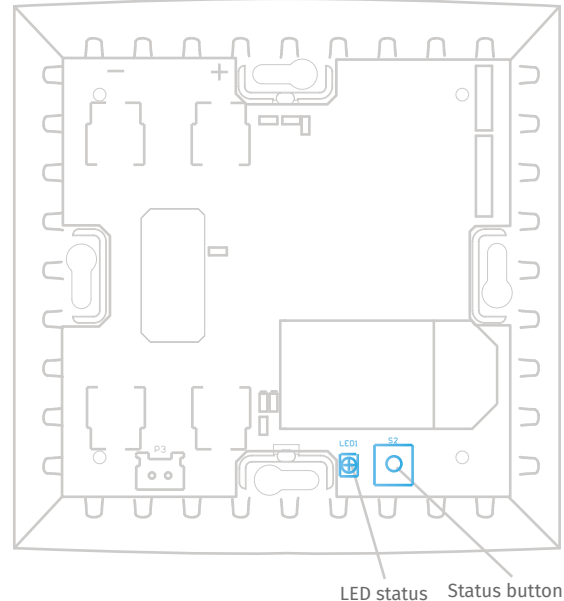When you press the button, the device indicates the current network status:
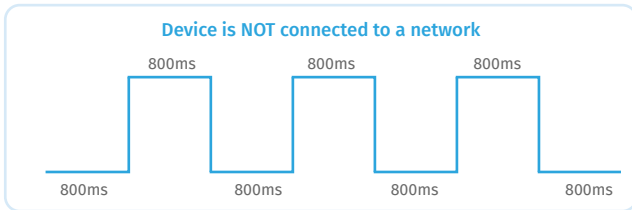
1.Device has successfully connected to the network (has received Join Accept):
a.The LED will blink on (30ms duration) and off (800ms duration) multiple times to indicate that it's connected to a network

Device is connected to a network

30ms   30ms   30ms   30ms

800ms   800ms   800ms   800ms   800ms

2.Device is not yet connected to a network:
a.The LED will blink on (800ms duration) and off (800ms duration) multiple times.

Device is NOT connected to a network

800ms   800ms   800ms

800ms   800ms   800ms   800ms

LED status   Status button

⚠ **Warning:** The button has no other function than to check the connection status. Long-pressing it will NOT reset the device.

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: 9X7621HS

DevEUI: 70B3D25DD30009E1

AppEUI: 70B3D25DD3000000

AppKey: a0658dfae72131saf1249abc11

Register

⚠️ The data is example. Do not use.

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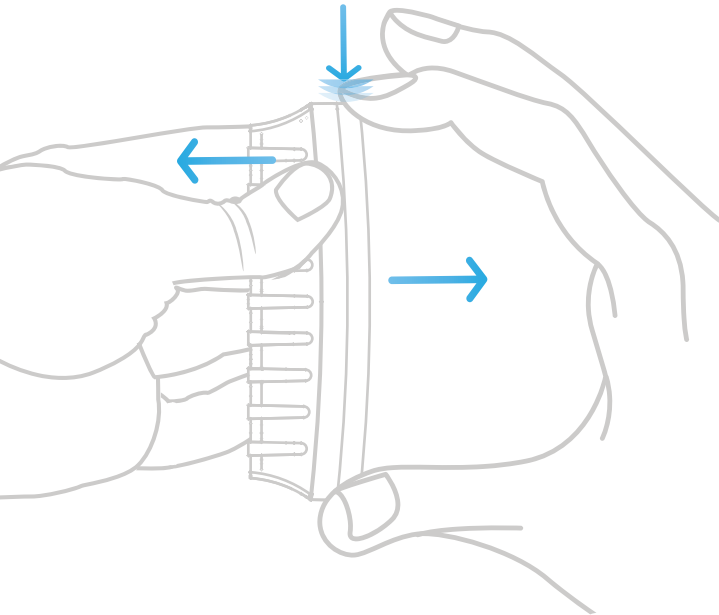
MClimate_LoRaWAN_51177

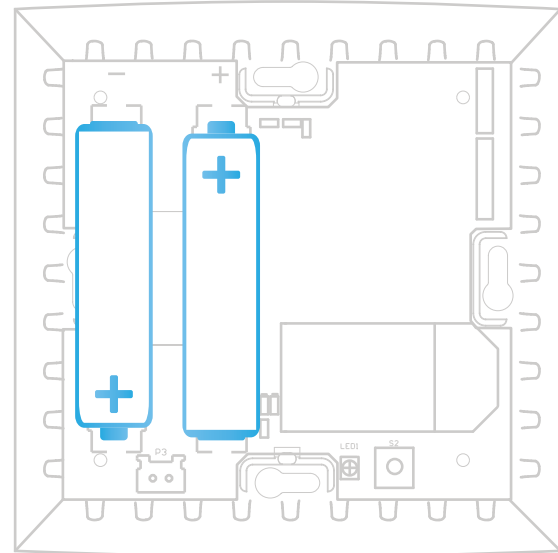| Serial Number	DevEui	AppEui	AppKey
G...	70B...	70B...	5fc31...

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

Commissioning

3 In order to remove the frontal plastic cover, apply pressure on the bottom and top and bottom sides of the device and gently lift one of the sides.

4 After inserting the 2xAA 1.5VDC batteries in the device, it will automatically connect to the network. In order to see whether the device has connected to the network, please check **LED, Buttons and behaviour.**
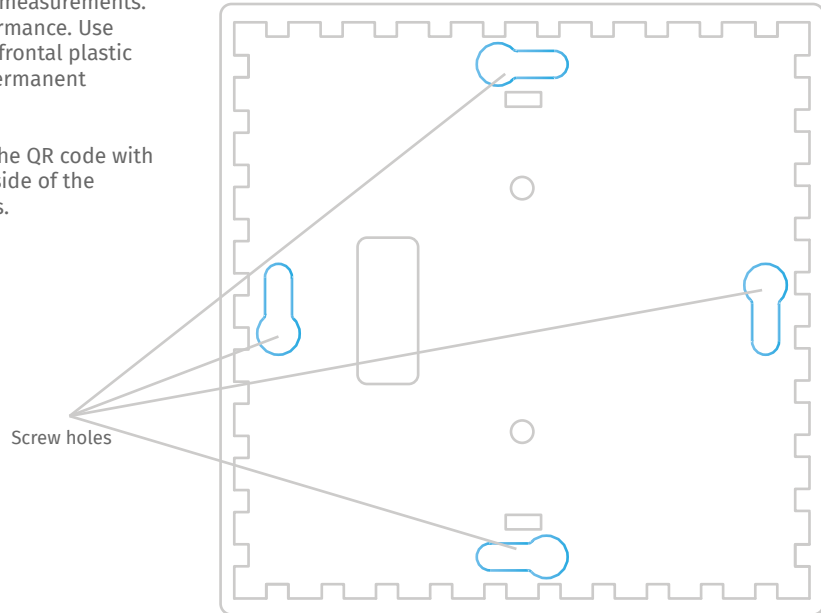

Disassembled H&T Sensor, top view

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 air vents as it will negatively impact the measurements. Avoid big metal as it will worsen the RF performance. Use double-sided tape to attach it or remove the frontal plastic cover and use screws to attach it in a more permanent manner.

We recommend installing the device so that the QR code with the serial number stays on the bottom-right side of the device in order to ensure good measurements.
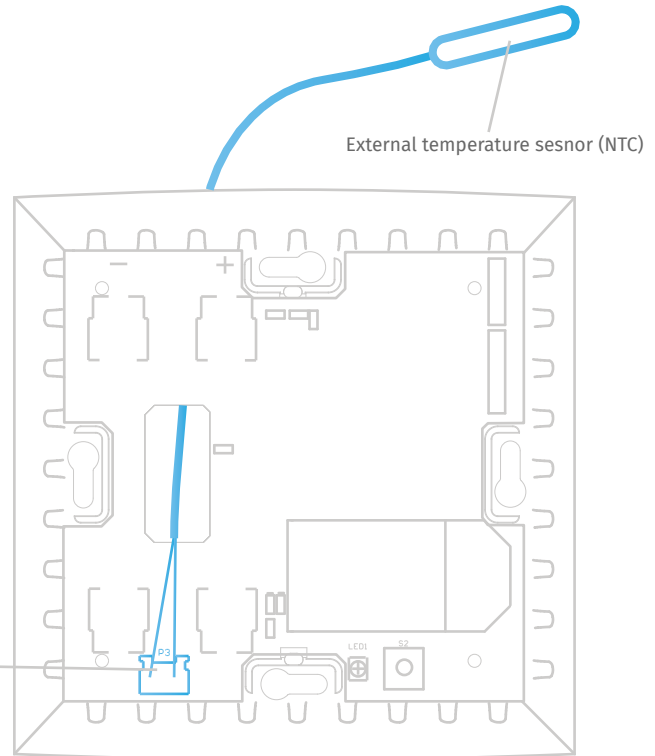
Screw holes

H&T Sensor, back view

Installation of external temperature sensor (NTC)

MClimate H&T measures ambient temperature and relative humidity using a digital temperature sensor. The device also supports installing an additional temperature sensor (NTC) in cases where you want to monitor e.g. pipe surface temperature.

In case you have purchased an external temperature sensor (NTC), connect it to the connector as shown in the picture below. You will automatically start receiving the temperature reading as of the next uplink.

External temperature sesnor (NTC)

Connect the External temperature sensor (NTC) to **port P3**

Disassembled H&T Sensor, top view

M Climate