

MICA 2023



Wall Installation Guide

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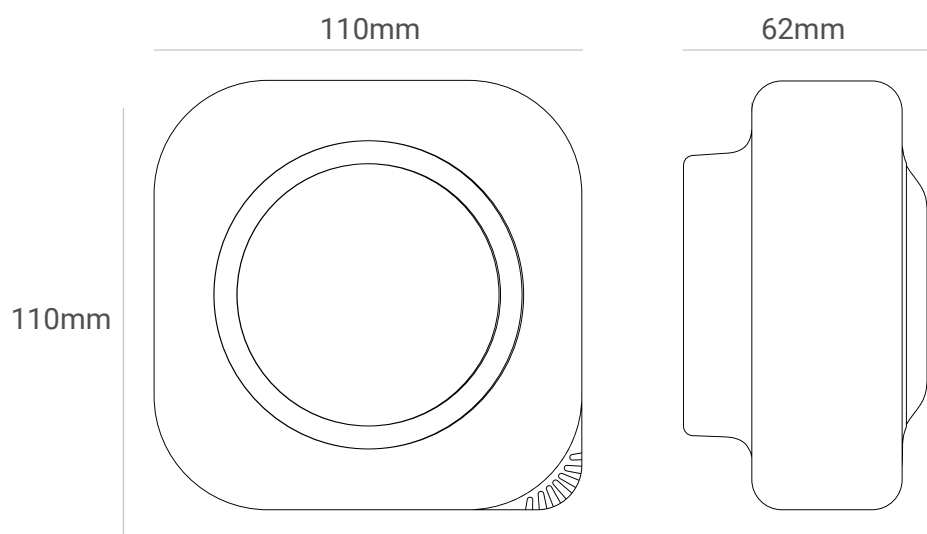
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General Information

Features

MICA models from 2023 onwards.
For indoor use.
PC-ABS plastic with UV protection.

Dimensions and weight.



Weight: 250 grams

Power Supply

Fast 110 - 240V AC 50 Hz 0.2A connector.
Fast 8 - 36V DC 2A 10W connector.

Connectivity

Wi-Fi (2.4 GHz up to 150 Mbit/s).
GSM (2G SIM card).
LoRaWAN.

Communication

Modbus RTU (serial protocol RS485).
Modbus TCP (wireless).



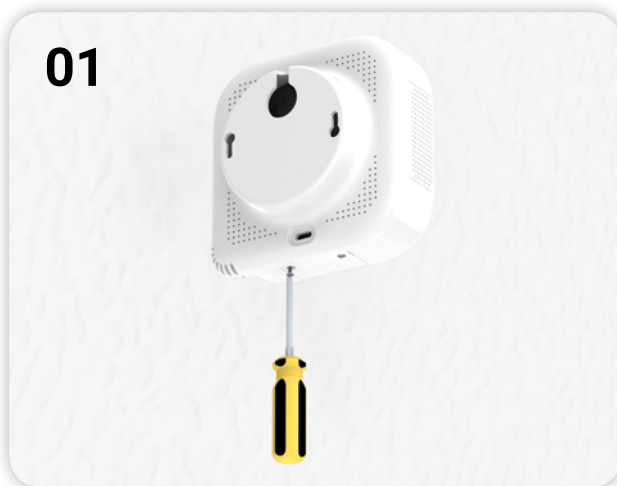
IMPORTANT:
Before you begin

Before you begin, perform the following steps:

1. Identify what type of installation you are going to carry out: on the wall or in an electrical box.
2. Check which model of MICA is the one you are going to install, this is indicated on the back of the box.



3. Open the box and check it's contents.
4. Remove MICA device from the box and remove it's back plate.



Remove bottom screws



Deattach the back plate

Recomendations

The recommended installation height for MICA is between 120cm and 180cm.

Wall installation

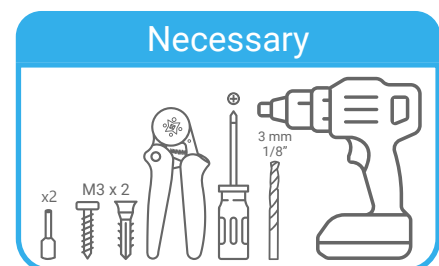
For Wi-Fi / Modbus TCP (110 - 240VAC)

Parts and pieces



Description

1. Back plate.
2. Power cord entry.
3. Mounting perforations (x2).
4. Assembly screws (x2).
5. PCB.
6. Female power terminal.
7. 1) Assembly guides (x2).
2) Assembly hooks (x2).
8. Male power terminal.
9. Drilling guide (included in the box).

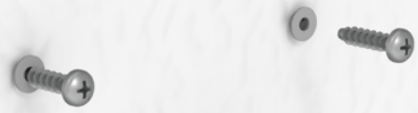


Instructions

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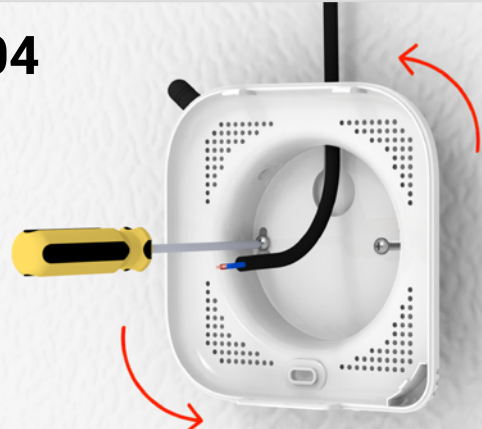
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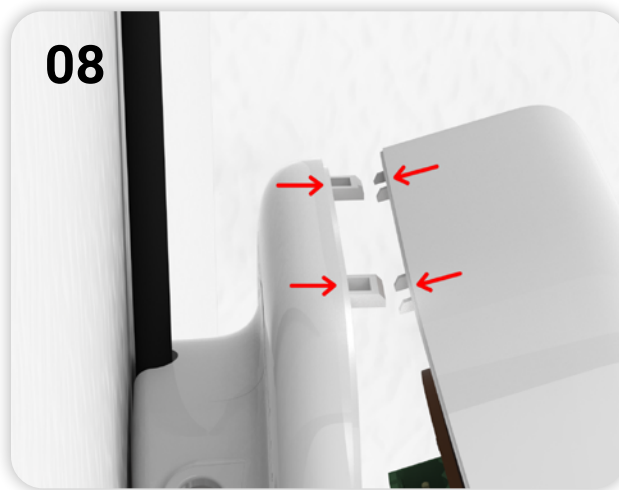
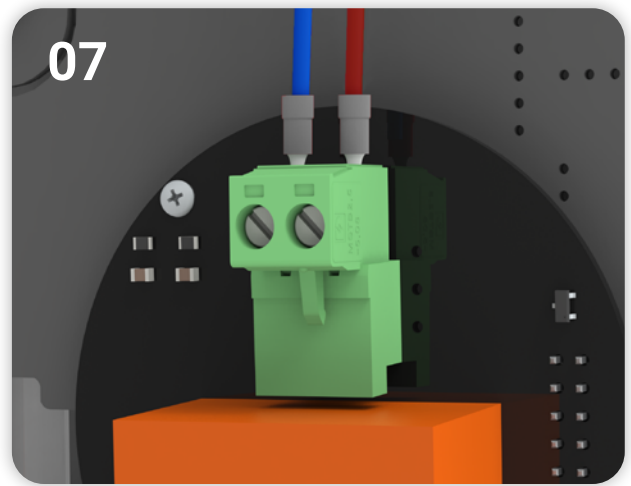
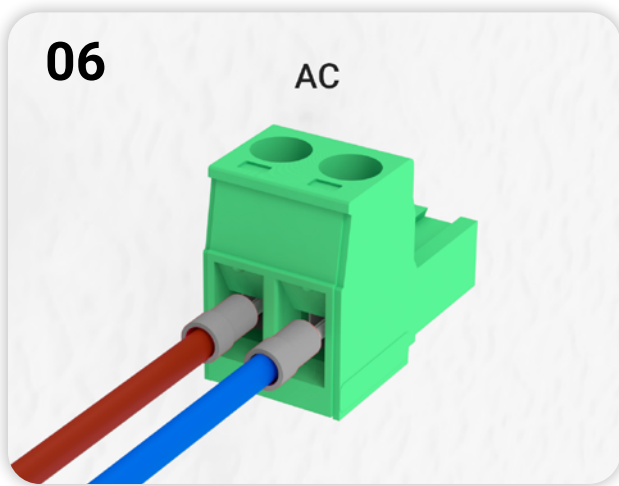


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Steps description

1. Make 2 holes in the wall with a drill using the drilling guide ⑨ included in the box.
Recommended height: 120 - 180cm.
2. Lightly insert a mounting screw into each of the holes we just made (use wall plugs if necessary).
3. Pass the power cord through the entry ② located on the back plate ①.
4. To mount the back plate ①, the screws must first be inserted through the mounting perforations ③ in the back plate. Then the back plate ① must be rotated into straight position. Lastly the screws can be tightened to secure the position.
5. Add a ferrule to each wire of the power cable.
6. Connect the wires to the male power terminal ⑧. For this, the ferrules must be inserted through the inputs and secured by tightening the terminal screws.
7. Connect the male power terminal ⑧ to the female power terminal ⑥ located in the PCB ⑤.
8. In order to close the MICA, the assembly guides ⑦ must first be aligned with the assembly hooks ⑦ (the front plate must be tilted down).
9. You can now close the MICA and secured with the two assembly screws ④ at the bottom.

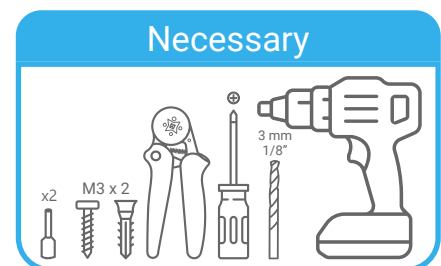
For GSM (110 - 240VAC)

Parts and pieces



Description

1. Back plate.
2. Power cord entry.
3. Antenna connection thread.
4. Mounting perforations (x2).
5. Assembly screws (x2).
6. PCB.
7. Antenna connector.
8. Power connector.
9. 1) Assembly guides (x2).
2) Assembly hooks (x2).
10. Antenna (included in the box).
11. Drilling guide (included in the box).

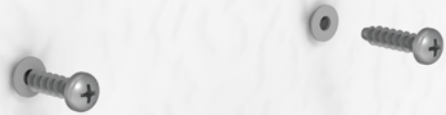


Instructions

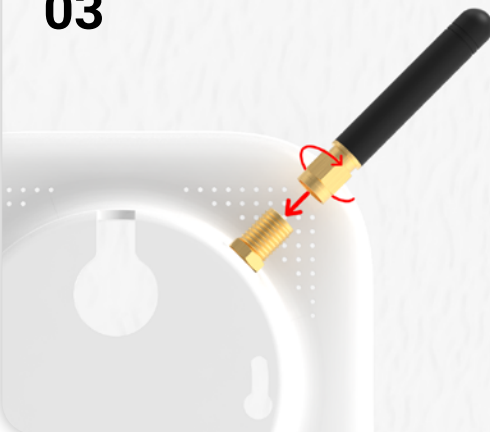
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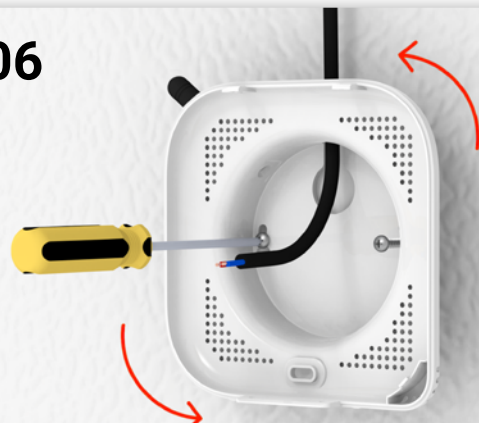
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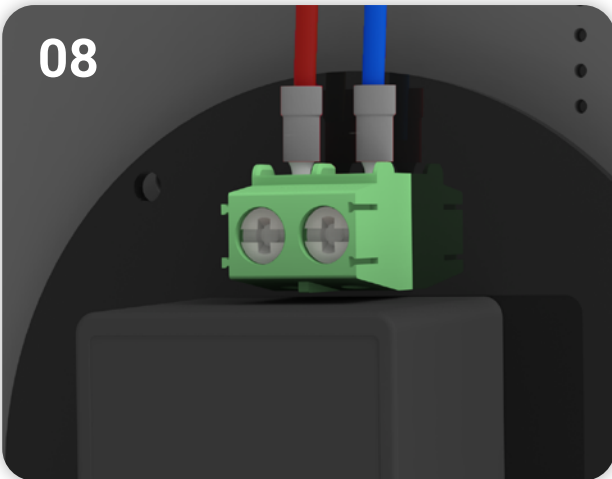
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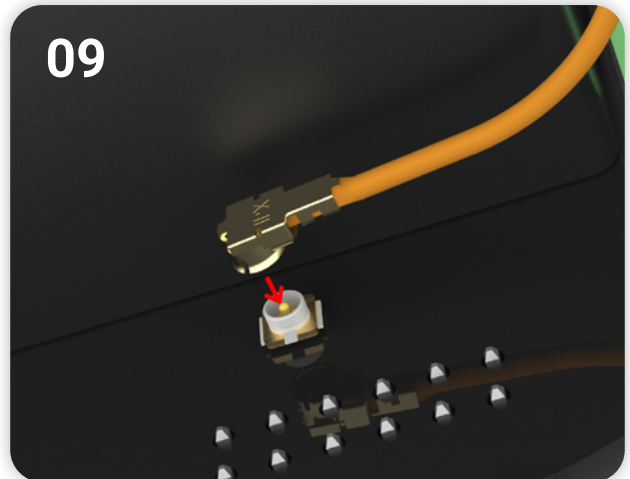
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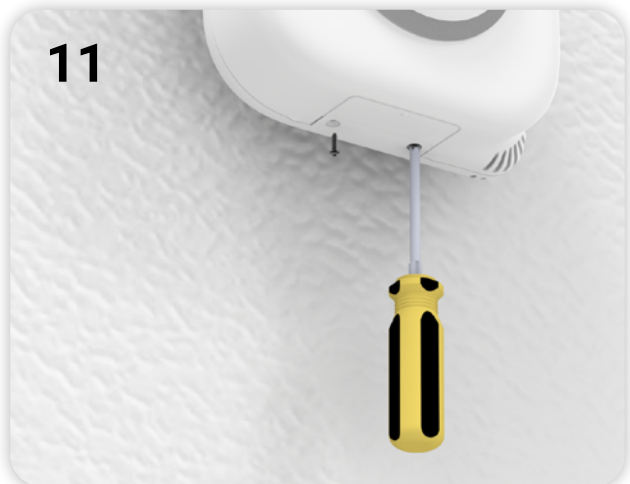
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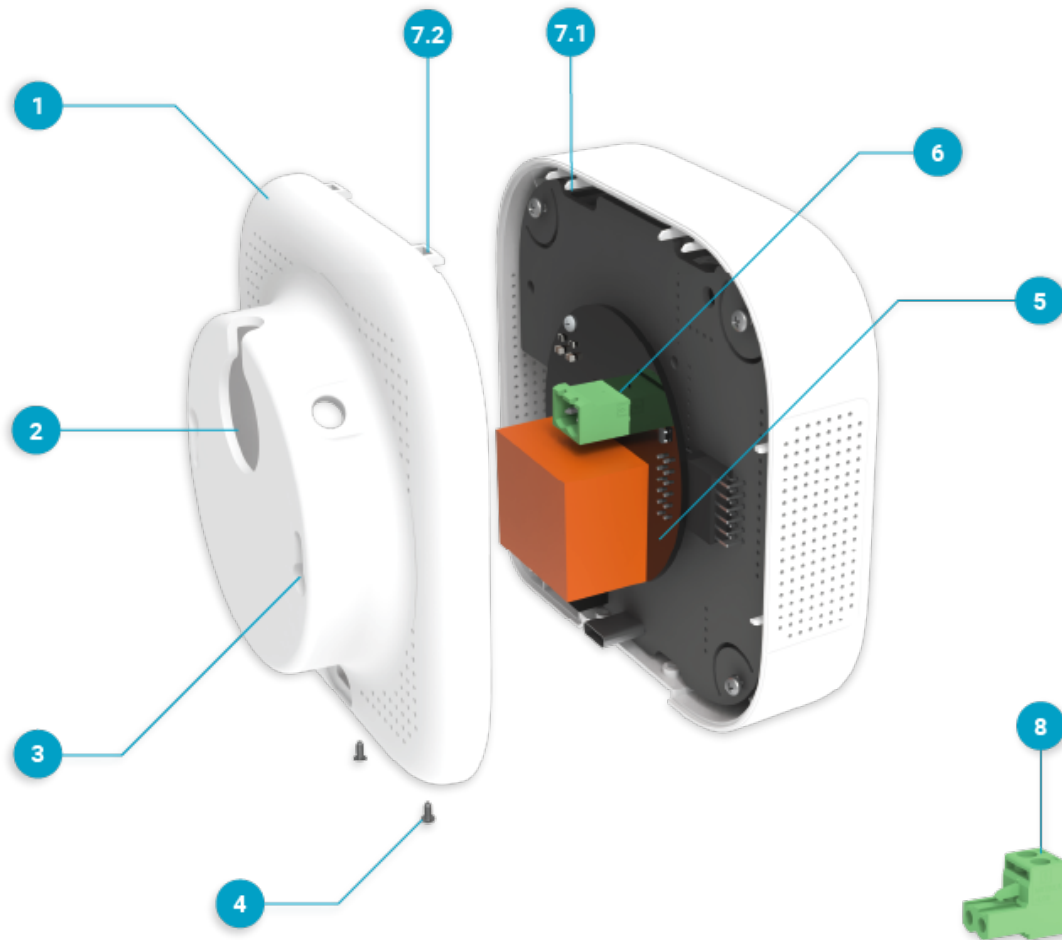
Steps description

1. Make 2 holes in the wall with a drill, using the drilling guide ❾ included in the box.
Recommended height: 120 - 180cm.
2. Lightly insert a mounting screw into each of the holes we just made (use wall plugs if necessary).
3. Next, the antenna ❿ must be screwed into its thread ❸.
4. Pass the power cord through the entry ❷ located in the back plate ❶.
5. To mount the back plate ❶, the screws must first be inserted through the mounting holes ❹.
6. Then the back plate ❶ must be rotated into straight position. Then the screws can be tightened to fix the position.
7. Add a ferrule to each wire of the power cable.
8. Connect the wires to the male power terminal ❸. For this, the ferrules must be inserted through the inputs and secured by tightening the terminal screws.
9. Connect the antenna ❿ to its connector ❷ located in the PCB ❻.
10. In order to close the MICA, the assembly guides ❾ must first be aligned with the assembly hooks ❾ (the front plate must be tilted down).
11. You can now close the MICA and secured with the two assembly screws ❺ at the bottom.

Electrical box instalation

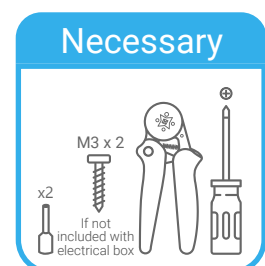
For Wi-Fi / Modbus TCP (110 - 240VAC)

Instructions



Description

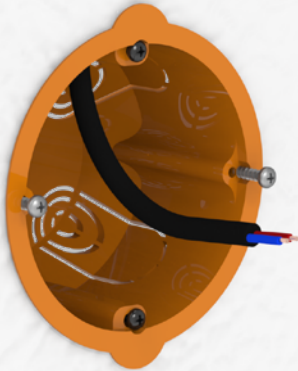
1. Back plate.
2. Power cord entry.
3. Mounting perforations (x2).
4. Assembly screws (x2).
5. PCB.
6. Female power terminal.
7. 1) Assembly guides (x2).
2) Assembly hooks (x2).
8. Male power terminal.



Note: The recommended height to install the electrical boxes is 120 - 180cm

Instructions

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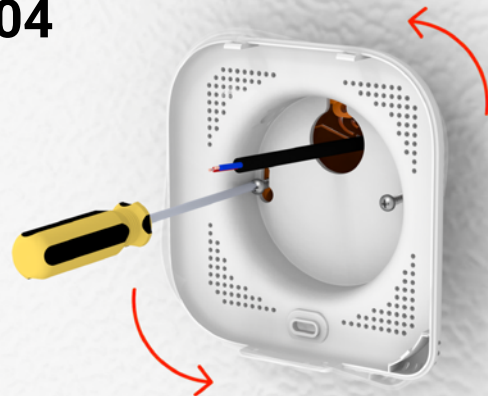
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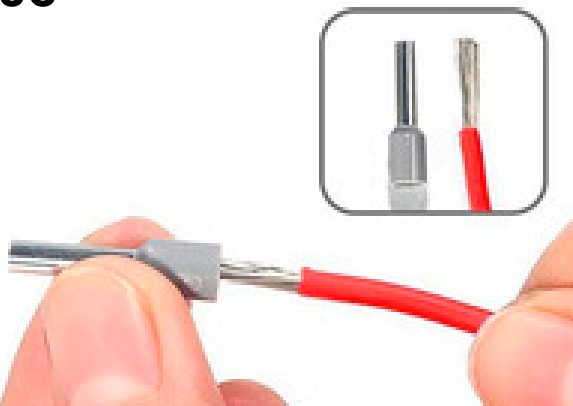
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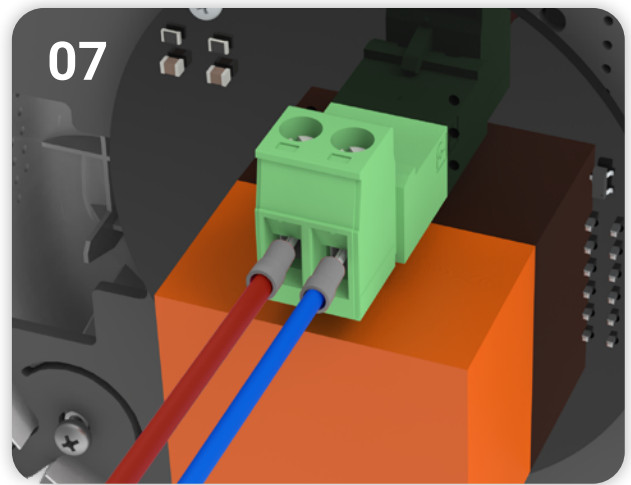
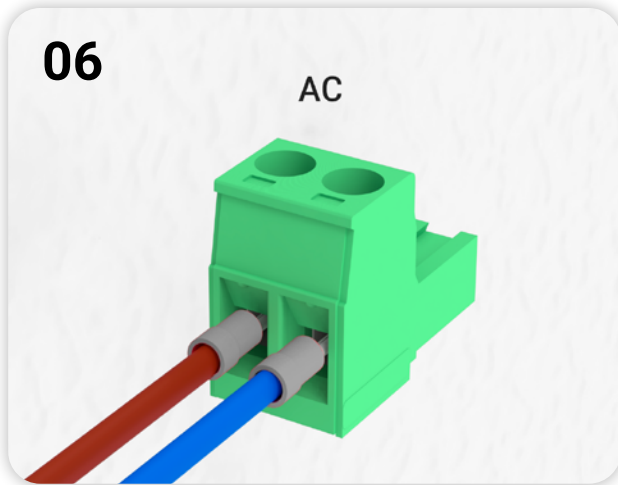


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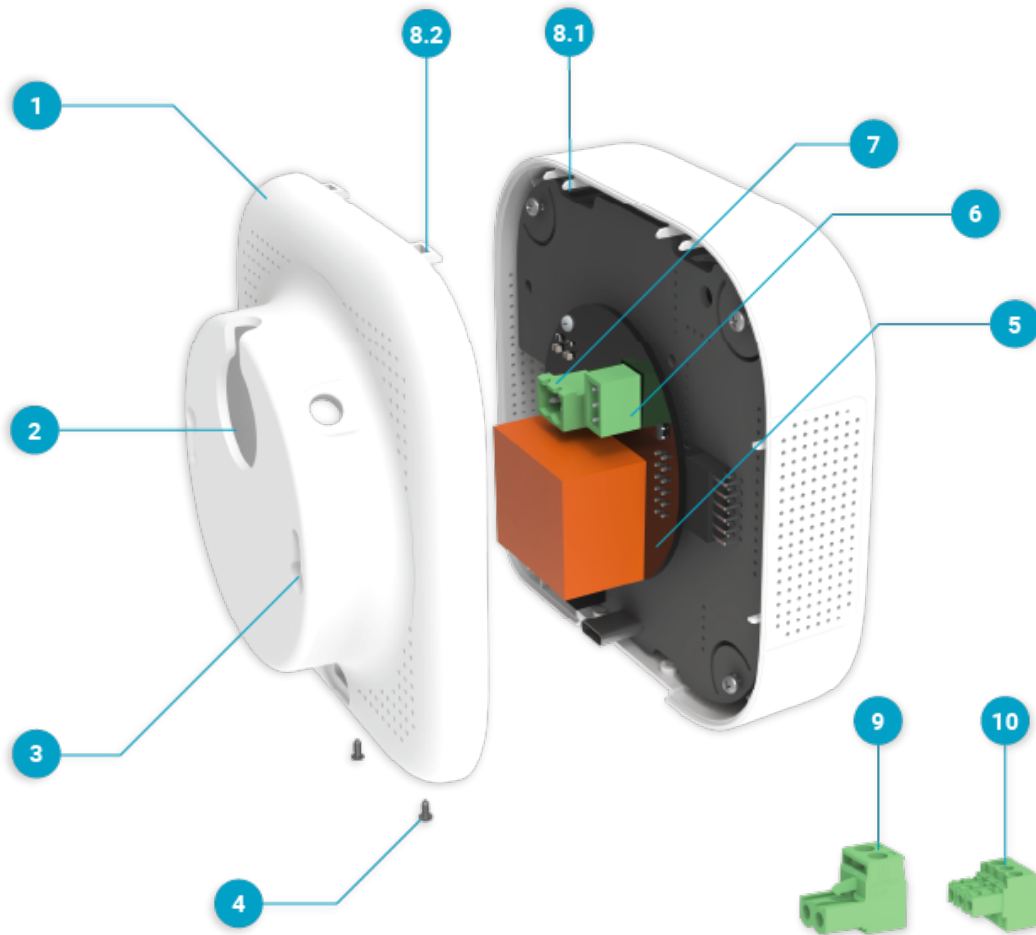


Description

1. Prepare 2 horizontal screws in the electrical box.
2. Pass the power cord through the entry ❷ located on the back plate ❶.
3. To mount the back plate ❶, the screws must first be inserted through the mounting perforations ❸ in the back plate.
4. Then the back plate ❶ must be rotated into straight position. Lastly the screws can be tightened to secure the position.
5. Add a ferrule to each wire of the power cable.
6. Connect the wires to the male power terminal ❸. For this, the ferrules must be inserted through the inputs and secured by tightening the terminal screws.
7. Next, connect the male power terminal ❸ to the female power terminal ❹ located in the PCB ❺.
8. In order to close the MICA, the assembly guides ❹ must first be aligned with the assembly hooks ❹ (the front plate must be tilted down).
9. You can now close the MICA and secured with the two assembly screws ❹ at the bottom.

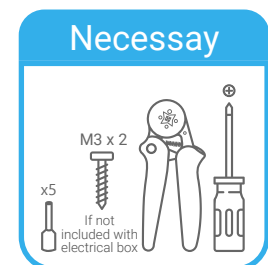
For Modbus RTU (110 - 240VAC)

Parts and pieces



Description

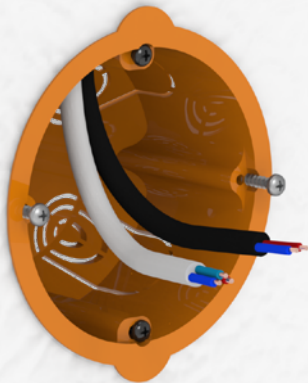
- 1. Back plate.
- 2. Power cord entry.
- 3. Mounting perforations (x2).
- 4. Assembly screws (x2).
- 5. PCB.
- 6. Female modbus terminal.
- 7. Female power terminal.
- 8. 1) Assembly guides (x2).
2) Assembly hooks (x2).
- 9. Male power terminal.
- 10. Male modbus terminal.



Note: The recommended height to install the electrical boxes is 120 - 180cm

Description

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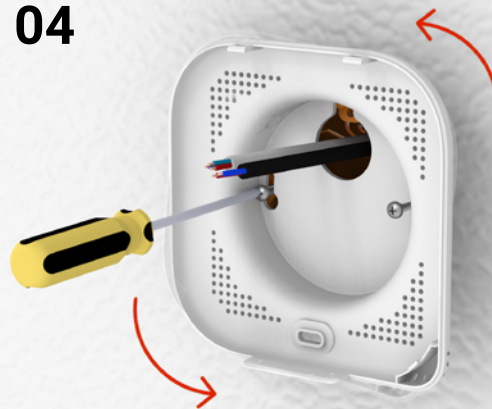
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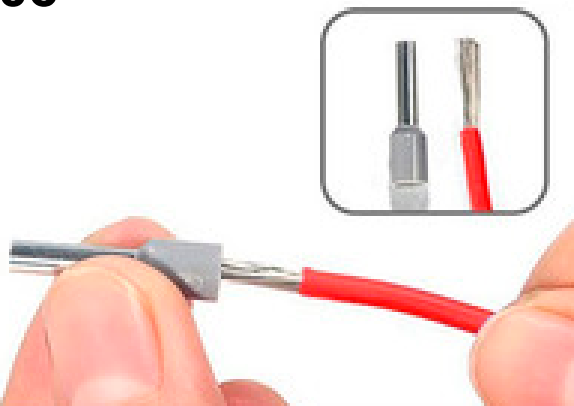
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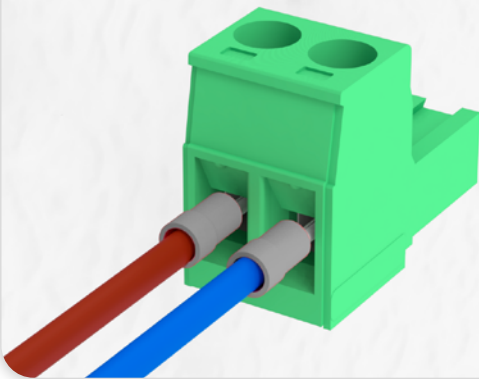


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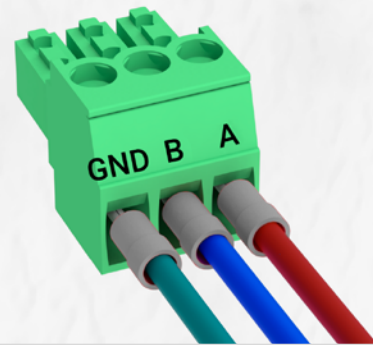
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AC

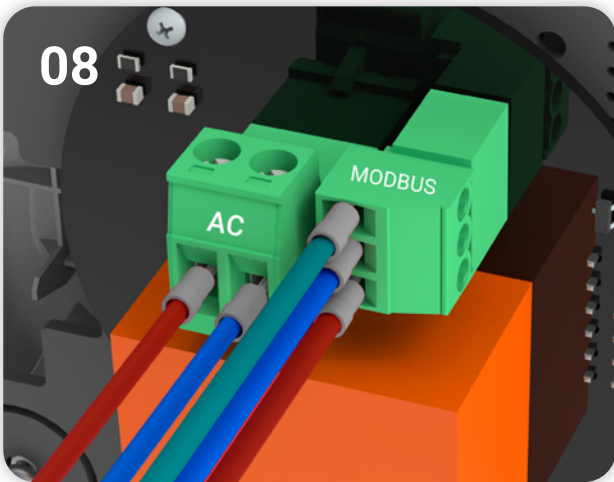


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MODBUS



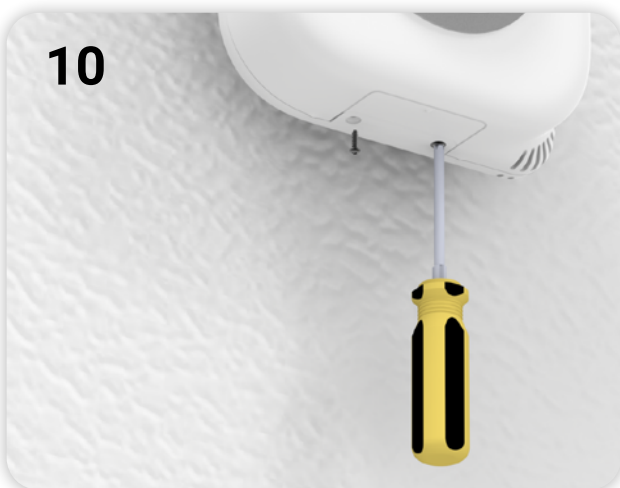
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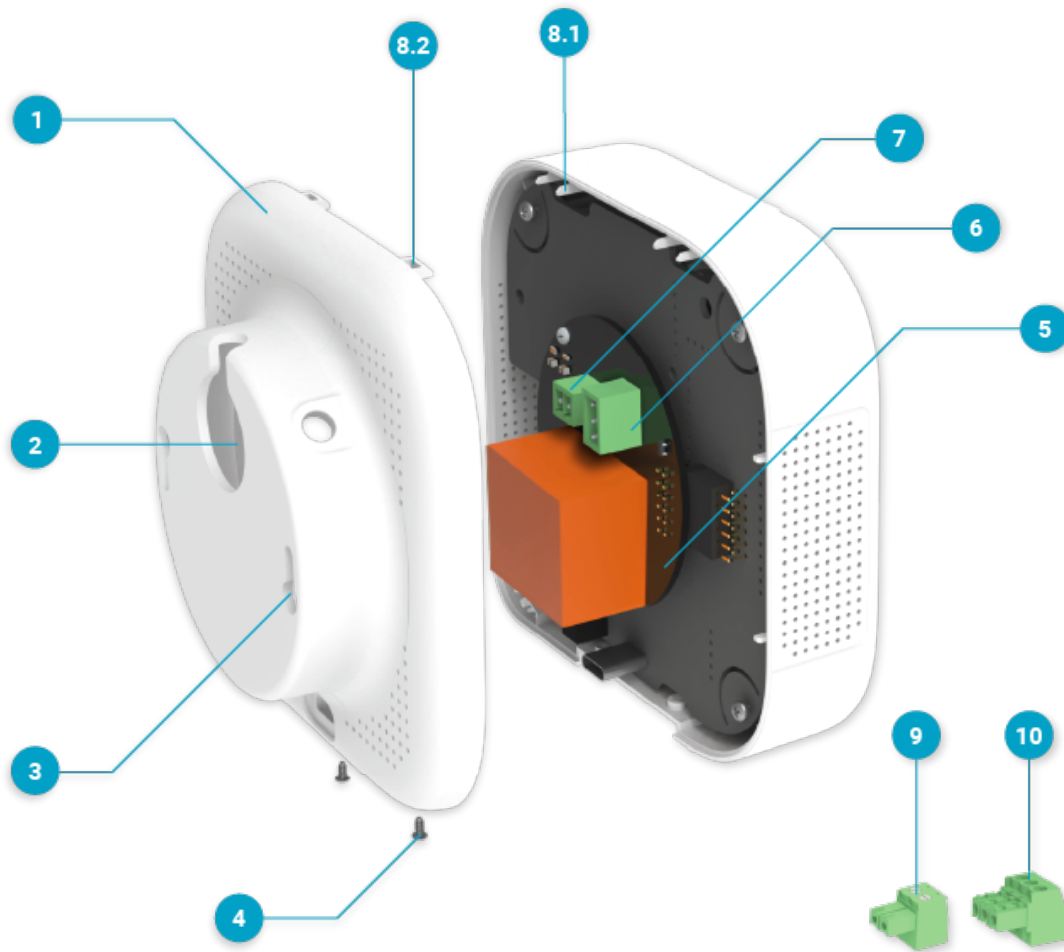
Description

1. Prepare 2 horizontal screws in the electrical box.
2. Pass both cables (power & modbus) through the entry ❷ located on the back plate ❶.
3. To mount the back plate ❶, the screws must first be inserted through the mounting perforations ❸.
4. Then the back plate ❶ must be rotated into straight position, the screws can be tightened to secure the position.
5. Add a ferrule to each wire of both power cable and the modbus cable.
6. Connect the power supply wires to the male power terminal ❸. For this, the ferrules must be inserted through the inputs and secured by tightening the terminal screws.
7. Then, connect the modbus wires to the male modbus terminal ❹ respecting the input sequence (GND* - A - B). For this, the ferrules must be inserted through the inputs and secured by tightening the terminal screws.
8. Next, connect both male terminals (❸ & ❹) to their respective female terminals (❷ & ❶) located in the PCB ❺.
9. In order to close the MICA, the assembly guides ❽ must first be aligned with the assembly hooks ❾ (the front plate must be tilted down).
10. You can now close the MICA and secured with the two assembly screws ❹ at the bottom.

[*] GND: Of the same device A & B come from (master, slave, etc).

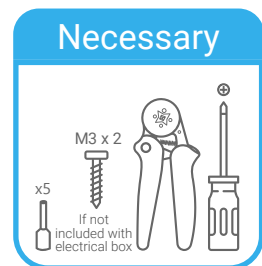
For Modbus RTU (8 - 36VDC)

Parts and pieces



Description

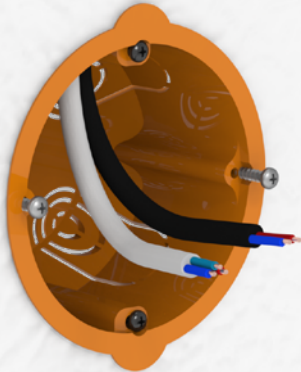
1. Back plate.
2. Power cord entry.
3. Mounting perforations (x2).
4. Assembly screws (x2).
5. PCB.
6. Female modbus terminal.
7. Female power terminal.
8. 1) Assembly guides (x2).
2) Assembly hooks (x2).
9. Male power terminal.
10. Male modbus terminal.



Note: The recommended height to install the electrical boxes is 120 - 180cm

Description

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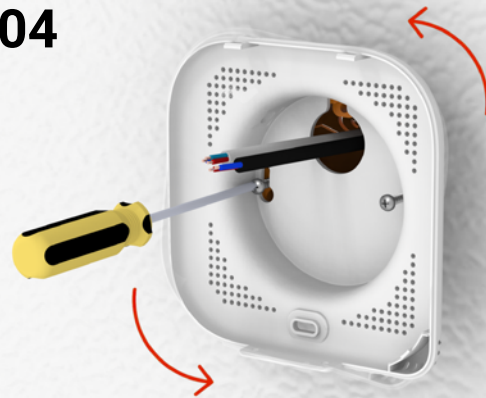
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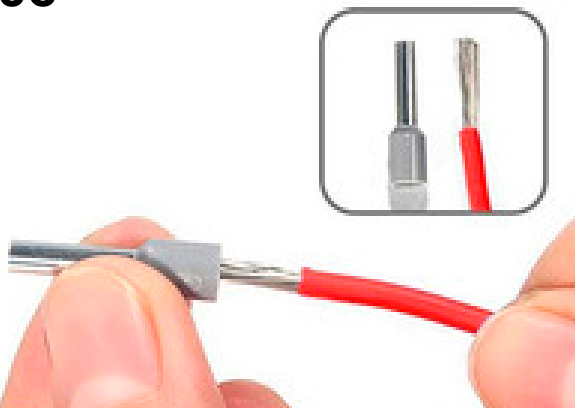
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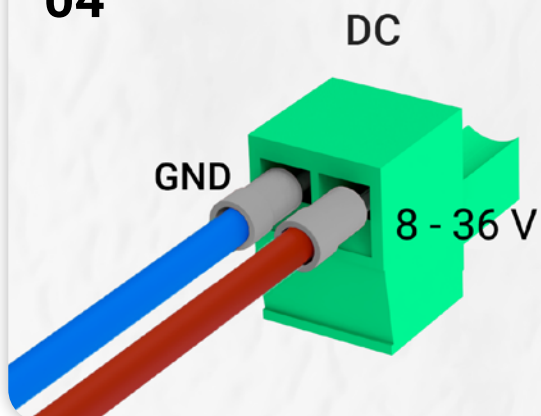
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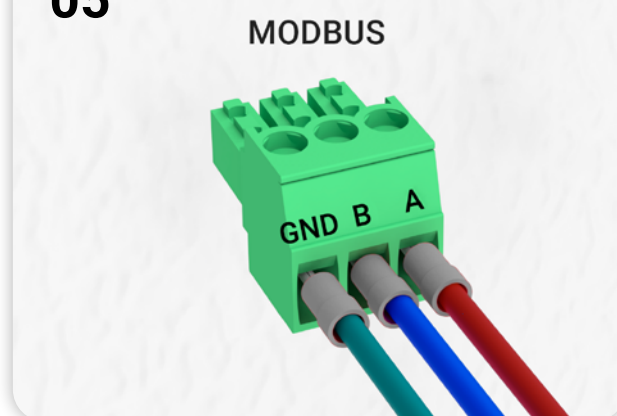
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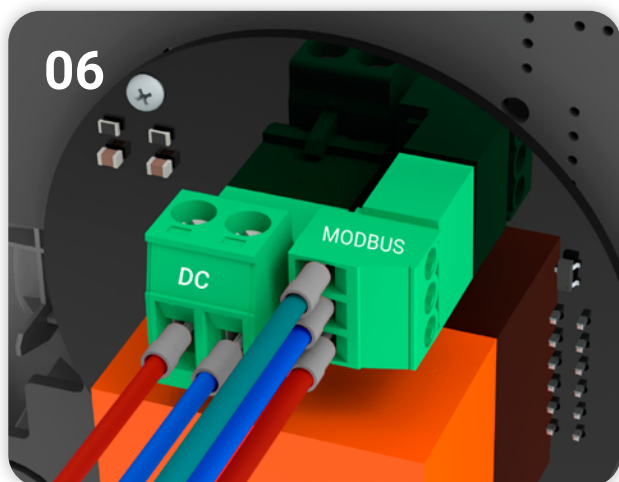
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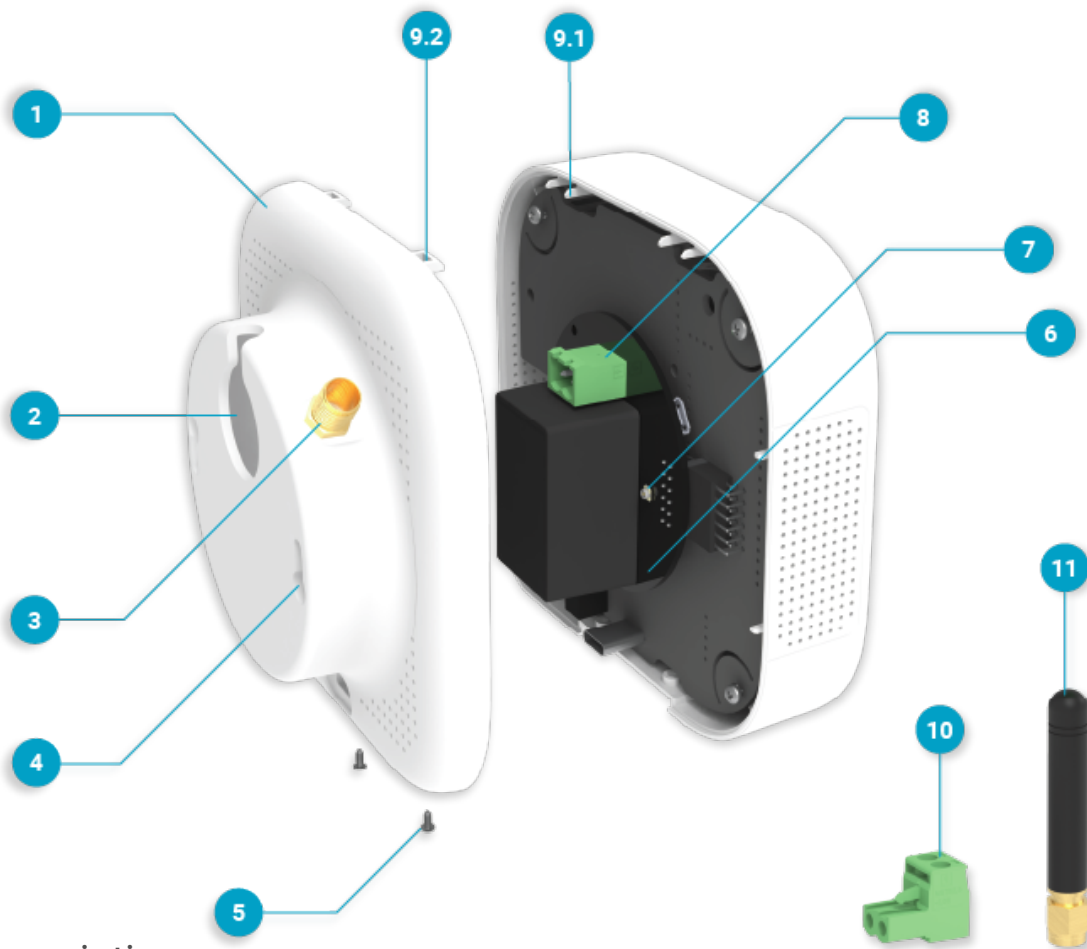
Description

1. Prepare 2 horizontal screws in the electrical box.
2. Pass both cables (power & modbus) through the entry ❷ located on the back plate ❶.
3. To mount the back plate ❶, the screws must first be inserted through the mounting perforations ❸, then the back plate ❶ must be rotated into straight position, the screws can be tightened to secure the position.
4. Once the back plate ❶ is fixed to the wall, the male power terminal ❹ provided (2 pins) must be fixed to the power cord, using the corresponding ferrules.
5. Then, the male modbus terminal ❿ provided (3 pins) must be fixed to the modbus cable, using the corresponding ferrules and respecting the input sequence (GND* - A - B) .
6. Next, connect both male terminals (❹ & ❿) to their respective female terminals (❼ & Ⓣ) located in the PCB ❺.
7. In order to close the MICA, the assembly guides ❸ must first be aligned with the assembly hooks ❸ (the front plate must be tilted down).
8. You can now close the MICA and secured with the two assembly screws ❹ at the bottom.

[*] GND: Of the same device A & B come from (master, slave, etc).

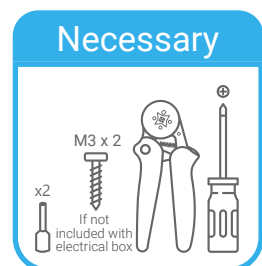
For GSM (110 - 240VAC)

Parts and pieces



Description

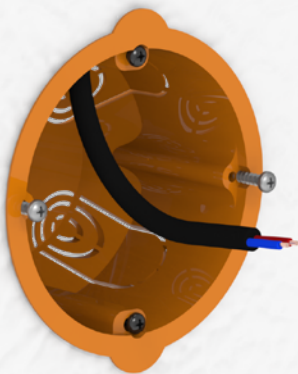
- 1. Back plate.
- 2. Power cord entry.
- 3. Antenna connection thread.
- 4. Mounting perforations (x2).
- 5. Assembly screws (x2).
- 6. PCB.
- 7. Antenna connector.
- 8. Female power terminal.
- 9. 1) Assembly guides (x2).
2) Assembly hooks (x2).
- 10. Male power terminal.
- 11. Antenna (included in the box).



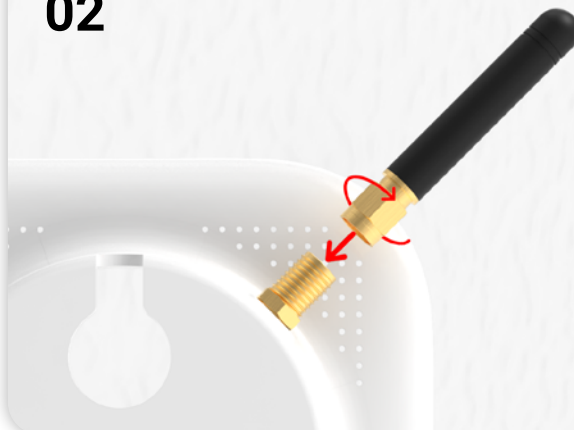
Note: The recommended height to install the electrical boxes is 120 - 180cm

Description

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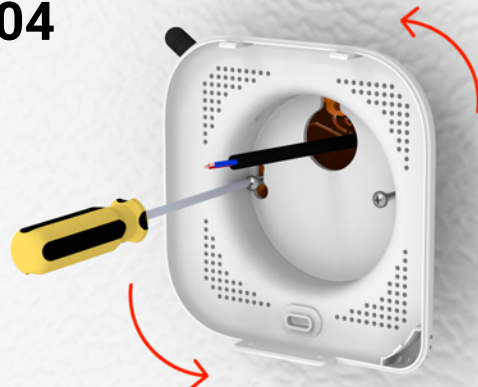
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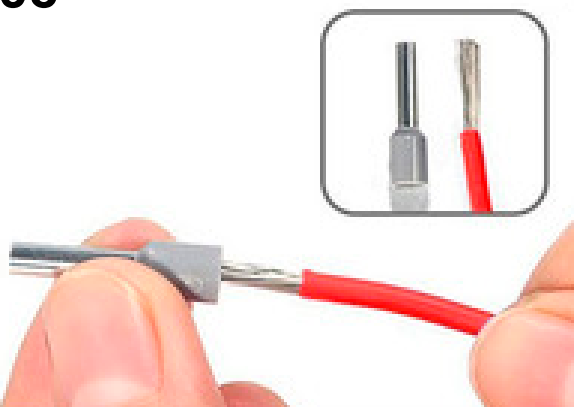
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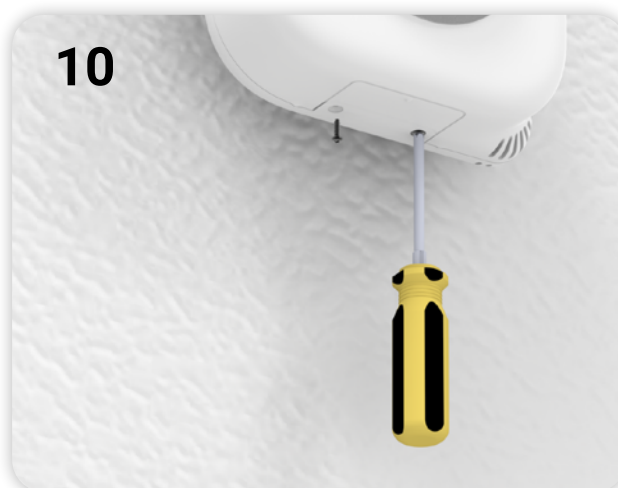
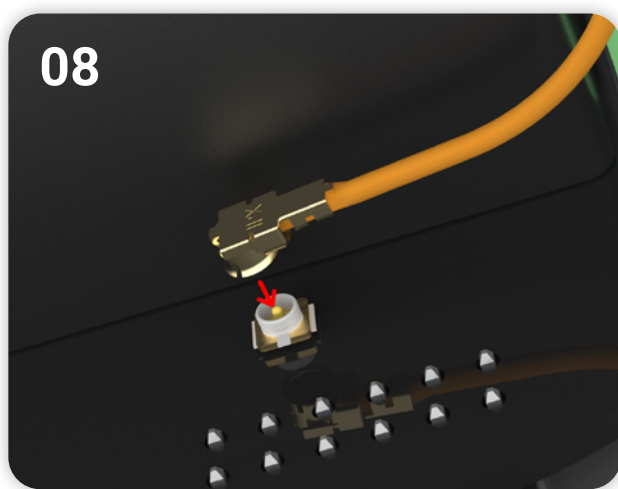
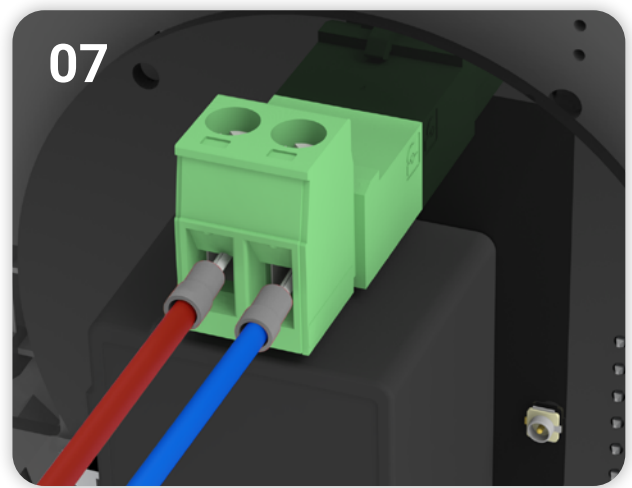
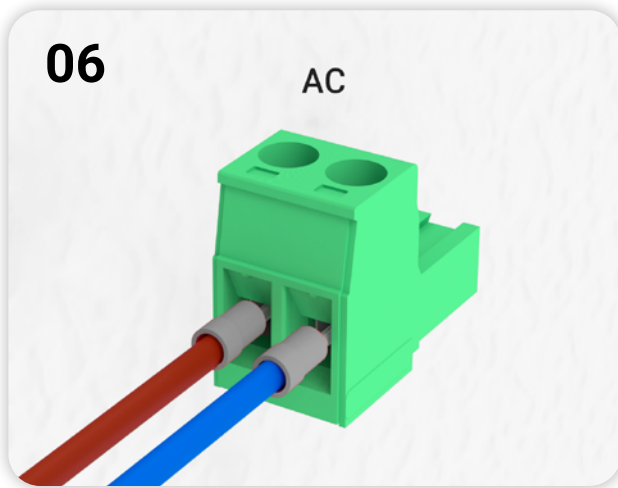


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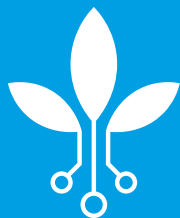


Description

1. Prepare 2 horizontal screws in the electrical box.
2. Screw the antenna 11 into its thread 3.
3. Next, pass the power cord through the entry 2 located on the back plate 1.
4. For wall mounting, the screws must first be inserted through the mounting perforations 4 in the back plate 1. Then the back plate 1 must be rotated into straight position and once it's straight, the screws can be tightened to secure the position.
5. Add a ferrule to each wire of the power cable.
6. Connect the wires to the male power terminal 8. For this, the ferrules must be inserted through the inputs and secured by tightening the terminal screws.
7. Connect the male power terminal 10 to the female power terminal 8 located in the PCB 6.
8. Next, connect the antenna 11 to its connector 7 located in the PCB 6.
9. In order to close the MICA, the assembly guides 9 must first be aligned with the assembly hooks 9 (the front plate must be tilted down).
10. You can now close the MICA and secured with the two assembly screws 5 at the bottom.

Usage notes

1. Check that there is no electrical current flowing during the installation or maintenance of wall-mounted equipment.
2. To reduce risks, always use qualified personnel for installation and maintenance.
3. To set up your MICA, download the [mobile app](#).
4. For any questions, contact the support department through the form on the [inBiot support page](#).



inBiot
Sense your building

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support@inbiot.es

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