Quick Start for SenseCAP M2 Multi Platform Gateway & SenseCAP Sensors

This tutorial will guide you to use the SenseCAP M2 Multi Platform gateway connect to SenseCAP LoRaWAN® sensors.
Table of Contents

1. Gateway Network Configuration ........................................................................................................... 1
   1.1 Connect to Ethernet Cable .......................................................................................................... 1
   1.2 Connect to WIFI via Luci .......................................................................................................... 2
   1.3 POE connection .......................................................................................................................... 7
   1.4 Checking the Gateway Connection Status .............................................................................. 8

2. Bind the gateway ............................................................................................................................... 9

3. Connect the SenseCAP Sensors .................................................................................................... 11

4. SenseCAP Portal and Mate APP .................................................................................................... 13
   4.1 Gateway Info ............................................................................................................................ 13
   4.2 Sensor data .............................................................................................................................. 14
1. Gateway Network Configuration

Connect the antenna and power adaptor to the gateway. The power LED will show in red, and in about 15s, the indicator on the top will flash green, indicating that the gateway is booting.

There are two ways to connect to the Internet. Choose the one that works for you.

1.1 Connect to Ethernet Cable

Connect the Ethernet cable to the device, and the indicator on the top will show solid green if the gateway is successfully connected to the internet.
1.2 Connect to WIFI via Luci

There are two ways for users to login Luci configuration page.

1.2.1 Access via router

- **Step 1**: Connect your device to an Ethernet cable, and connect your PC to the same router.

*Note*: Your PC and device should be connected to the same router/network.

- **Step 2**: Get IP Address of your device

Check the IP Address of your device on your router admin page.

- **Step 3**: Get your device Username and Password

You can find the Username and Password on your device label.
Step 4: Login Luci

Input the IP Address of your device in a browser to enter the Luci page. Then input your device username and password to login.

1.2.2 Access via device AP hotspot

Step 1: Turn on the device AP hotspot.

Press the button for 5s until the blue indicator flashes slowly to enter the configuration mode.

Step 2: Connect to the AP hotspot.

AP hotspot name is SenseCAP_XXXXXX (6-figure MAC address), default password is 12345678; connect your computer to this AP hotspot.
• **Step 3:** Get your device Username and Password

You can find the Username and Password on your device label.

![Device label image]

• **Step 4:** Log in to the Local Console

Input the IP Address (192.168.168.1) in your browser to enter the Local Console. Then input your device username and password, and click the Login button.

![Login screen image]
- **Step 5**: Connect to a WIFI

Click on Network - Wireless

![Network Connection Diagram]

Click on the Scan button to scan the WIFI.

![Scan Button Diagram]

Select your WI-FI to join the network.

![Select Network Diagram]
Submit the Wi-Fi password, and then click “Submit” and “Save”.

The indicator on the top will show solid green if the gateway is successfully connected to the WIFI.
1.3 POE connection

SenseCAP M2 supports PoE (Power on Ethernet) and is compatible with IEEE 802.3 af standard.

⚠️ Note:

You will need to have an extra PoE switch that provides 40V-57V DC power as a PSE (Power Sourcing Equipment) if your modem/router does not support PoE.
1.4 Checking the Gateway Connection Status

After powering on the gateway, there are two ways for you to check the gateway working status:

1) **LED Indicator**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Green</strong></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>Gateway is healthy and the internet is well connected.</td>
</tr>
<tr>
<td>Slow blinking</td>
<td>Gateway is booting, please wait.</td>
</tr>
<tr>
<td><strong>Blue</strong></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>The gateway is ready for internet connection. Further configuration is needed.</td>
</tr>
<tr>
<td>Slow blinking</td>
<td>Configuration mode, and will auto exit after 5 mins if no activity.</td>
</tr>
<tr>
<td>Fast blinking</td>
<td>Press the button for 30s until the indicator show fast flash will trigger the factory reset.</td>
</tr>
<tr>
<td><strong>Orange</strong></td>
<td></td>
</tr>
<tr>
<td>Slow blinking</td>
<td>Firmware is updating, and please do not power off the gateway or disconnect the internet.</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>Gateway is only with a factory firmware, and will be updated to the latest firmware automatically when it is connected to the internet.</td>
</tr>
<tr>
<td><strong>Red</strong></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>Hardware issue or internet connection failure.</td>
</tr>
<tr>
<td>Slow blinking</td>
<td>Gateway not connected to the LNS.</td>
</tr>
</tbody>
</table>

2) **SenseCAP Mate App**

In the SenseCAP Mate App, “Online status” indicates “Online” when the gateway is connected to the network and can receive and transfer sensor data. Please refer to the next chapter for obtaining the SenseCAP App.
2. Bind the gateway

SenseCAP Mate APP supports device configuration and remote management.

- **Step 1**: Download the SenseCAP Mate APP

  SenseCAP Mate APP for iOS on App Store
  SenseCAP Mate APP for Android on the Google Play Store
  You can also download App from App Center

- **Step 2**: Login the APP

  If it is your first time to use the SenseCAP platform, please register an account first.

  **Note**: Please select **Global** of Server Location.
Step 3: Add device

Click the + in the upper right corner and select Add device. Then scan the QR code on your gateway label.

Set up your device name and location. Then confirm your settings. After successful binding, you will see your gateway in the Device directory.
3. Connect the SenseCAP Sensors

- **Step 1**: Add device
  Click the + in the upper right corner and select **Add device**
  Then scan the QR code on your gateway label.
Step 2: Select the frequency plan

Click on “Settings”, set the platform and frequency, the frequency should match your gateway frequency.

eg: If your gateway is US915 version, then you need to set your sensor to US915 frequency.

Note: SenseCAP M2 Multi-Platform Gateway can’t connect to Helium network.

For more configurations about SenseCAP sensors, please refer to:
SenseCAP Sensors
4. SenseCAP Portal and Mate APP

SenseCAP Mate APP and SenseCAP Portal can be used to check your device status and device management.

- **SenseCAP Mate APP for iOS** on App Store
- **SenseCAP Mate APP for Android** on the Google Play Store
- **SenseCAP Portal**

4.1 Gateway Info

Check the gateway info on the SenseCAP Portal and SenseCAP Mate APP.
4.2 Sensor data

Check the sensor data on the SenseCAP Portal and SenseCAP Mate APP