

Quick Start for SenseCAP M2 Multi Platform Gateway & SenseCAP Sensors





Table of Contents

1.Gateway Network Configuration
1.1 Connect to Ethernet Cable1
1.2 Connect to WIFI via Luci2
1.3 Connect with Cellular(for 4G version)7
1.4 POE connection
1.5 Checking the Gateway Connection Status9
2. Bind the gateway
3. Connect the SenseCAP Sensors
4. SenseCAP Portal and Mate APP14
4.1 Gateway Info14
4.2 Sensor data15

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 Ethernet port, 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 a Ethernet cable, and connect your PC to the same router.

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

			Route		F
SenseCAP M2		—ETH or WI-FI-	• • • •	 —ETH or WI-FI-	→
)				

• 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.

●●● (**) SenseCAP - Overview - LuCl × · → C ▲ 不安全 192.168.8.169/cgi-bir	+ 1/uci/ 1. Input your Hospot's IP	◆ ① ☆ C₂ Ø ▲ 井 □ Ø ジ
SenseCAP		
Authorization Re Please enter your username and Username Password	admin	Hotspot's password
Powered by LuCi / OpenWrt 21.0	2.0 r1-20220322 r16279-5cc0535800	3.Click the 'Login' button

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.

C Settings WLAN	
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	• • 🕄
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) ج ۽
) ج ھ
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	• • (1)
SenseCAP_1C6858	• • 🕣

• Step 3: Get your device Username and Password

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



• 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.

equired	
nd password.	
<u></u>	Login
ie	admin

1.2.3 Connect to a WIFI

Click	on	Network	-	Wireless
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Click on the **Scan** button to scan the WIFI.

SenseCAP	Status - System - Netwo	rk ▼ LoRa ▼ VPI	N 👻 Logout		AUSED
Wireless					
👳 radio0	MediaTek MT76x8 Channel: 11 (2.462 GHz			Restart	
📶 -17 dBn	n SSID: TP-LINK_CS Mo BSSID: 2C:F7:F1:1C:70:		A2 PSK (CCMP)	Disable	
Associated S	Stations				
Network	MAC address	Host	Signal / Noise	RX Rate / TX Rate	
			Collecting data		
				Save & Apply - Save Rese	ət

Select your WI-FI to join the network.

Network: Wir	reless Scan					
Signal	SSID	Channel	Mode	BSSID	Encryption	
🚄 -40 dBm	se.101_24G	6	Master		WPA2 PSK (CCMP)	Join Network
🚽 -39 dBm	hidden	6	Master	1.000 C	WPA2 PSK (CCMP)	Join Network
📕 -39 dBm	hidden	6	Master		WPA2 PSK (CCMP)	Join Network
🚽 -23 dBm	M2-test	11	Master		mixed WPA/WPA2 PSK (CCMP)	Join Network
게 -39 dBm	SEEED-Guest	11	Master	1.1.1.1.1.1.1	mixed WPA/WPA2 PSK (CCMP)	Join Network
🚽 -39 dBm	SEEED-MKT	11	Master	in the second	mixed WPA/WPA2 PSK (CCMP)	Join Network

Submit the Wi-Fi password, and then click **Submit** and **Save**.

Se		
Joining Network: "se.101 Replace wireless configuration	⇒ SADIA	
Name of the new network	wwan	
1 WPA passphrase	Specify the secret encryption key here.	
Lock to BSSID	Instead of joining any network with a matching SSID, only connect to the BSSID 34:2E:86:70:2A:24.	Cancel Submit

Then click **Save and Apply** to apply your settings.

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

1.3 Connect with Cellular(for 4G version)

- Power (12V-2A) Power (12V-2A) CPS Connector (Optional) GPS Connector (Optional) LoRa Connector (RP-SMA Female) LTE LED Nano SIM LORa LED ULAN LED MicroSD Card
- Step 1: Plug your SIM card into the Nano-SIM card slot

• Step 2: Login the Luci page, and click on Network - Cellular



• **Step 3**: Setup the APN info, and click **Save and Apply** to apply your settings.

Cellular	
Enable	
APN	u
User	
Auth	
Password	·····
Pincode	
	Save & Apply - Save Reset

1.4 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. SenseCAP M2 + PoE Router / Modem WAN/LAN Power (40V-57V)



SenseCAP M2 + PoE Switch + Router / Modem



1.5 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

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

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

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



Download SenseCAP Mate App

• **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.

15:53		• •
< 114992	2846221600009	
General	Settings	
Platform	Other Platform	~
Frequency Plan	US915	~
Sub-Band	Sub-Band2	~
Uplink Interval (mi	in) 6	
Activation Type	ΟΤΑΑ	~
Device EUI	2CF7F1C04160000B	
SenseCAP for Th	e Things Network	
SenseCAP for He	lium	
Helium		
The Things Netwo	ork	
Other Platform		

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

		Settings	General Information
	Device UEI		General Information
LoRaWAN	Network Standard		evice Basic Propertie
		20	Device Name
AN Multi-Platform Gateway	Sensor Type LoraWA		Gateway EUI
EU863-870	Frequency	RaWAN	etwork Standard
20000 0/0	, i oquanoj	fline	Online Status
v1.1	Hardware Version	J863–870	requency(MHz)⑦
)22-09-09 15:24:17	Production Time
2022-09-09 15:24:17	Production Time	022-09-26 11:20:13	Binding Time
		1	lardware Version
2022-09-26 11:20:13	Add Time	9.6–7	Software Version

SenseCAP Portal

SenseCAP Mate APP

4.2 Sensor data

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

						Air Temperature	Air H	umidity
📚 SENSECAP 🗮							65.54	
Deshboard Devices / S	insor Node / Table / Node D	Details - Displaying the deta	iled information of the device,	you can customize the device	name, view device networking infor	26.72 °C	65.54	1 % RH 💧
a Devices	formation Charmel	100		ocation Binding				
Ontering		Data	Sattings I	CO2				
∠ Sensor M	asurement Deta							
Node Group	Channel Number 1(002,	Temperature and Humidity	Se			1067 ppm	a contraction of the contraction	
Sensor Node						Lu Lu		
DevelopKit	A Day	A Weak	A Month	Day, Week, Month ends a	if the time of the current time.			
ev		Air Temperature-4097		-O- Ar Hunida	y-4098		20	22-09-29 10:49:16
Data 👋			生息 〇步		生間の生		20	122-03-23 10:43-10
Table	30		101	r	2 H U S	History		
Graph	25-		80 50	mand	14	Thistory		
Channel	20-		40			10%		
Custom Type 🔨 Measurement D	4 10-		30			🔏 🔏 Air Temperat	ure	
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Security ~	\$2.00 18.00 (9-28 09-28	00:00	06:00 10:09 12:00 19-29 09-29 09-28	18:00 00 09-28 09	100 06.00 104.9 1-29 09-29 09-29	30	n	mo
	Time	Air Temperature-4097	Air Humidity-4098	C02-4100	Total of 281data, up to 15 per	25		2 B)
Access API keys	2022-09-29 10:45:00	26.72	65.54	1067		20 -		
Billing 🗸	2022-09-29 10:25:00	26.29	64.46	897		15-		
Account	2022-09-29 10:20:00	26.26	63.08	916		10-		
Account	2022-09-29 10:10:00	26.48	62.33	1014		5-		
Credit History	2022-09-29 10:05:00	26.4	63.8	1085		0		
Consumption	2022-09-29 10:00:00	26.3	62.96	825		09-22 10:57 09-24 1	0:05 09-26 09:13	09-28 08:21
	2022-09-29 09:55:00	26.18	62.98	907				
Sub Account 🗠	2022-09-29 09:50:00	26.01	62.37	833		Day	Week	Month
Add Sub Account	2022-09-29 09:45:00	25.79	61.23	727				
Sub Account List	2022-09-29 09:40:00	25.7	57.25	707				
	2022-09-29 09:35:50	25.71	57.91	685		Records 3246		
	2022-09-29 09:30:00 2022-09-29 09:25:00	25.77 25.86	58.77 59.58	663 647				
	2022-09-29 09:25:00	25.85	60.35	608		1 mars		
	2022-09-29 09:15:00	25.96	59.81	585		Time	Air	Temperature
	ε 1 2 3	4 5 6 … 19	> Go to page					
						2022-09-29 10	:49:16	26.72 °C

SenseCAP Portal

SenseCAP Mate APP