



How to Integrate Milesight Gateways and Devices into the Datacake Platform



Version Change Log			
Version	Revision Date	Revision Details	Revised By
V1.0	20250313	Initial	Lockon



Preface

Datacake is a company specializing in IoT (Internet of Things) data management and visualization, providing a low-code cloud platform that supports multiple communication protocols such as LoRaWAN, MQTT, and REST API. Datacake enables users to quickly connect IoT devices for data storage, analysis, and visualization. It is widely used in smart agriculture, environmental monitoring, industrial IoT, and other application scenarios. The platform supports custom dashboards, alarm rules, and remote device management, allowing enterprises to efficiently deploy and manage IoT solutions.

This document primarily introduces how to directly integrate the UG65 gateway with the Datacake platform and provides a complete step-by-step process for adding an AM319 device as an example on the Datacake platform.


1. Prerequisites

- **Gateway Model:** UG65 (firmware version v60.0.0.45), or UG56, UG67
- **Sensor Model:** AM319 (firmware version v1.6)
- **Frequency Band Used in This Guide:** US915
- **Gateway is connected to the Internet**

2. Register a Datacake Account

Visit <https://app.datacake.de/signup> and fill in the required information as prompted on the webpage:





Create an Account

First name
Lockon

Last name
wen

Email address
lockon.wen@milesight.com


Name of your first workspace
Milesight-Demo
If left blank, your name will be used

Project Type
☐ Business ☐ Hobby

Use Case
☐ Asset Tracking ☐ Industrial
☐ Building Management ☐ Smart City
☐ Cold Chain ☐ Smart Farming
☐ Energy ☐ Other

Password
.....
Passwords must have a minimum of 8 characters, including at least one uppercase letter, one lowercase letter, one number and one special character (e.g. \$%*^&!).

After completing the registration, visit <https://app.datacake.de/login> and log in using the credentials you created earlier:



Email address
lockon.wen@milesight.com

Password
.....
[Forgot password?](#)

Login

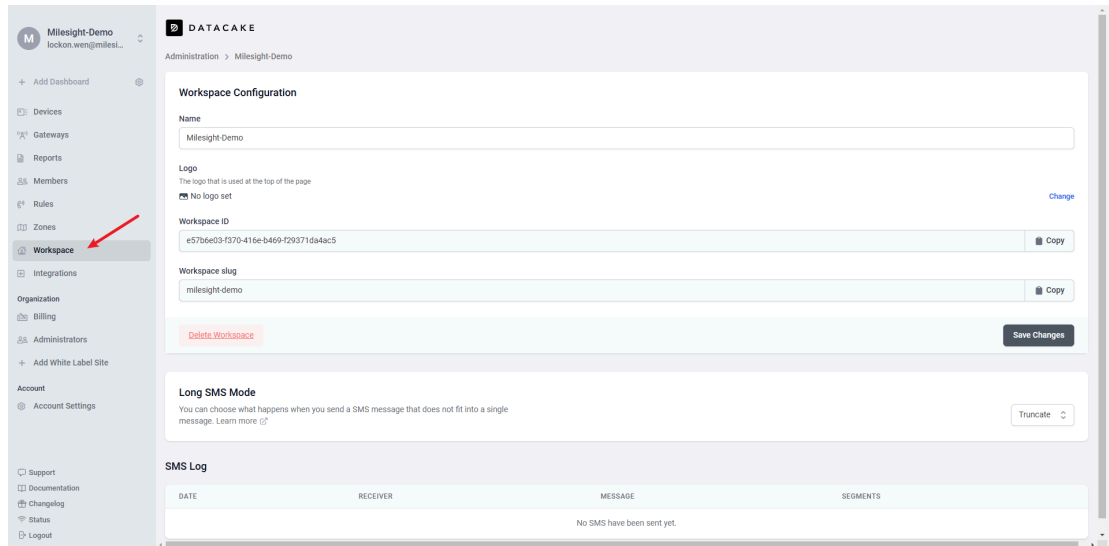
Or

Create Account

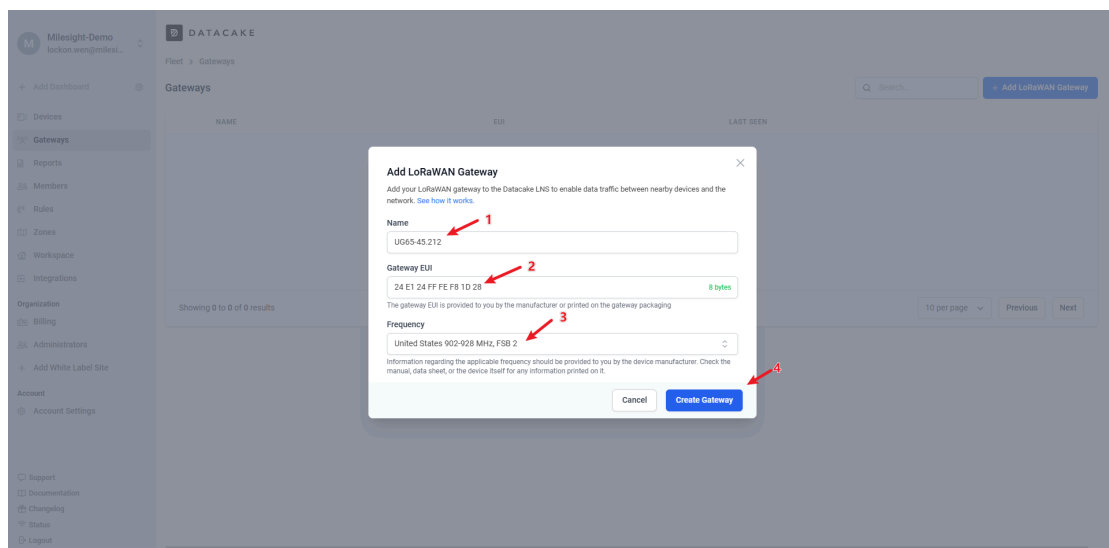
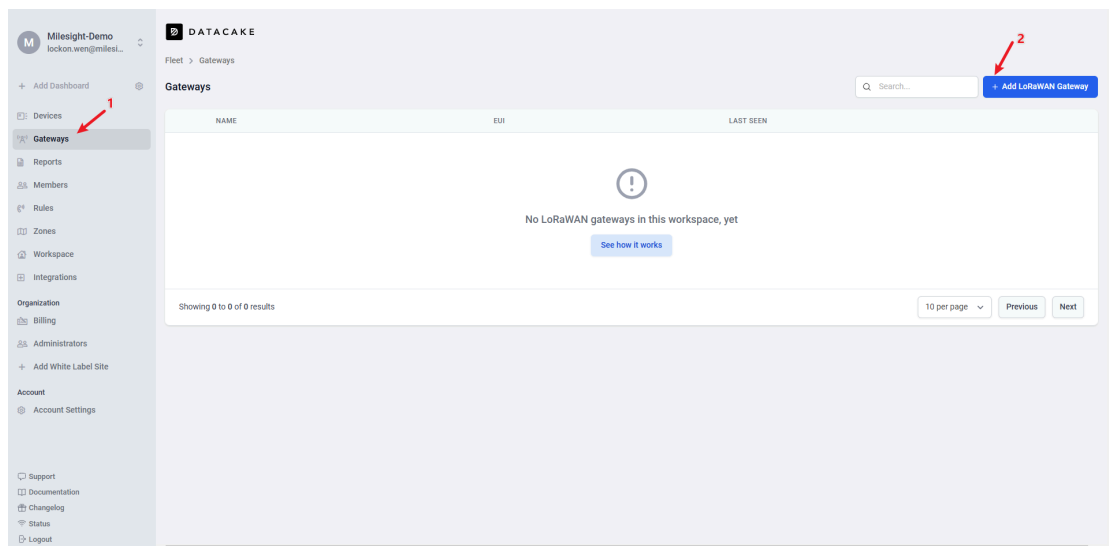
3. Add a Gateway to the Platform

After logging in for the first time, you will see the workspace information entered during registration, as shown in the image below:





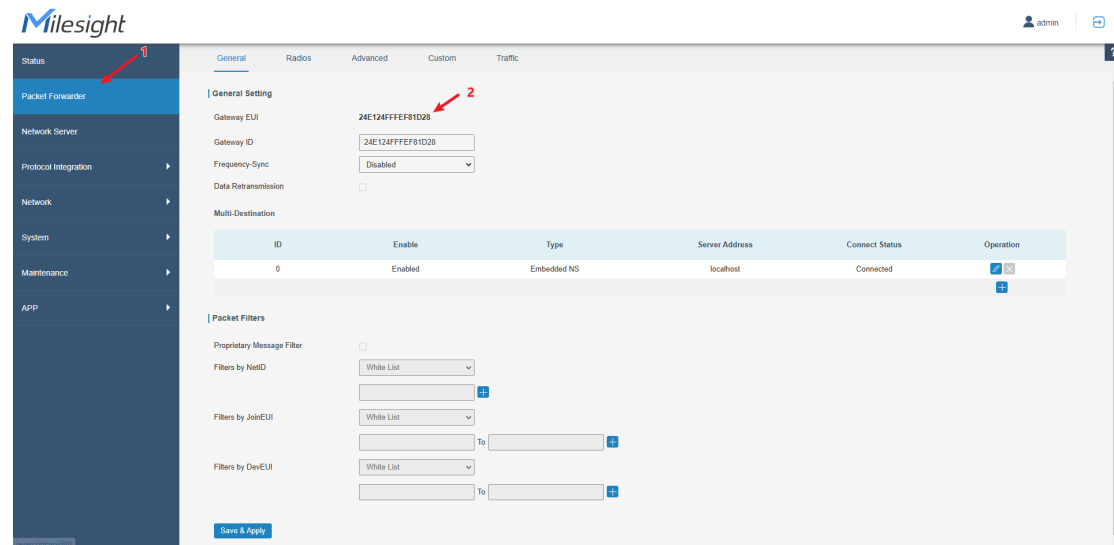
Next, navigate to the Gateways section as illustrated in the following image:



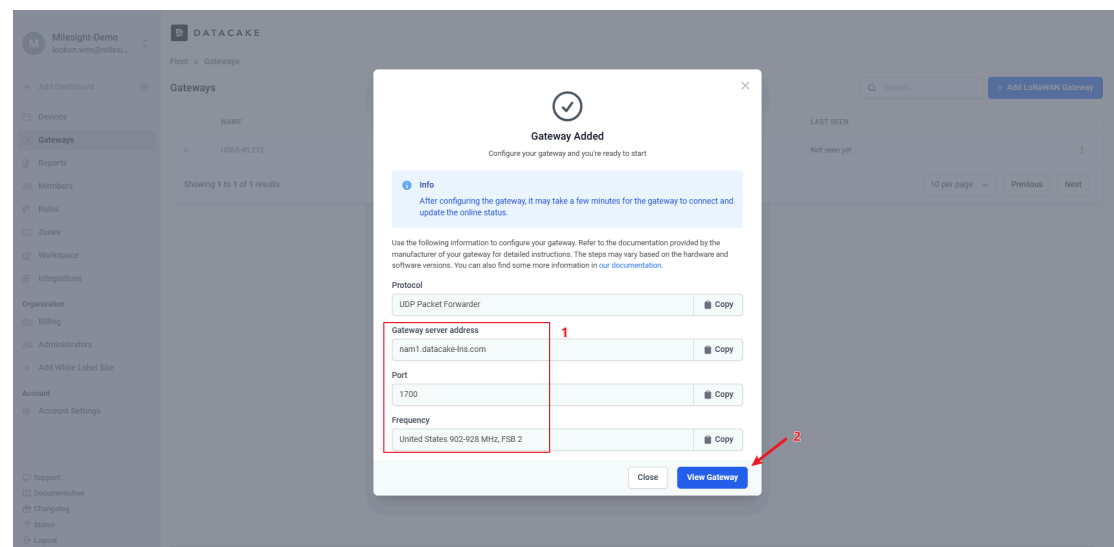
Since we are using a gateway and sensor that operate on the US915 frequency

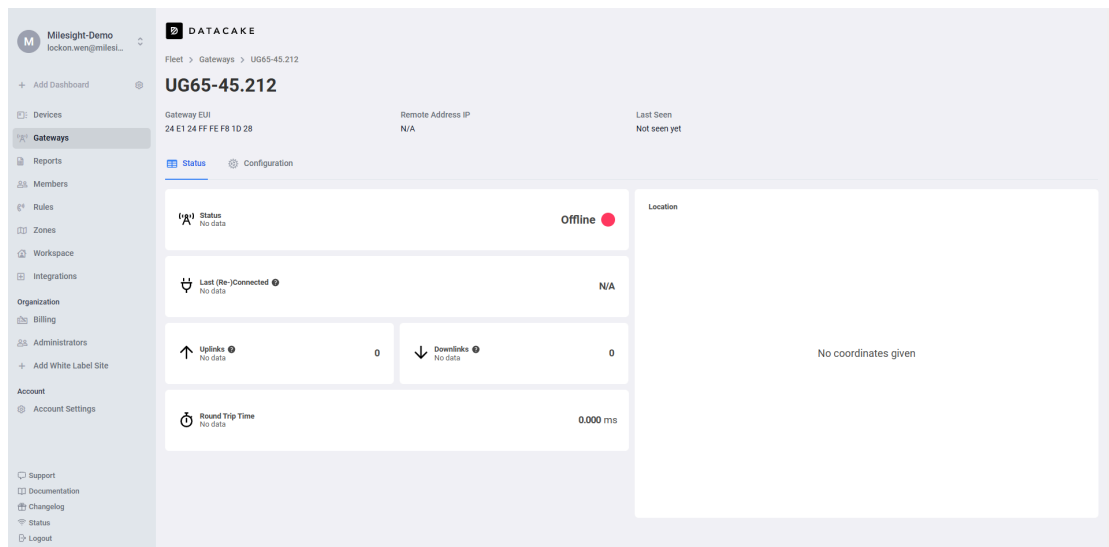


band, make sure to select the appropriate Frequency option from the dropdown menu, as shown. And the Gateway EUI needs to be obtained from the UG65 device. You can retrieve this from the UG65 management interface, as shown below:



Proceed with the setup by clicking the Create Gateway button. A new window will appear, containing the necessary parameters for Semtech connection. Make sure to record these details, as they will be required when configuring the UG65 gateway later:

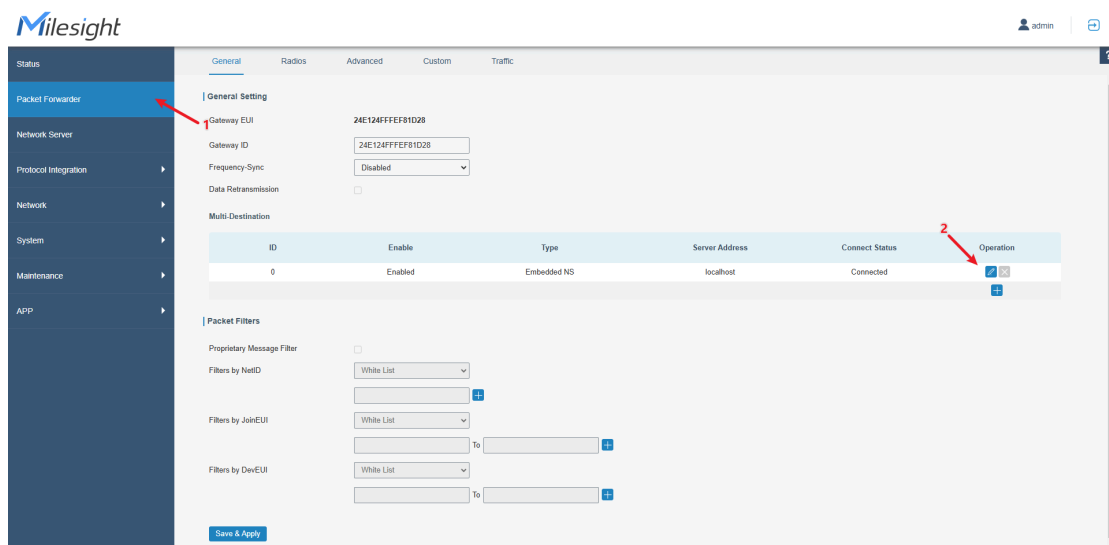


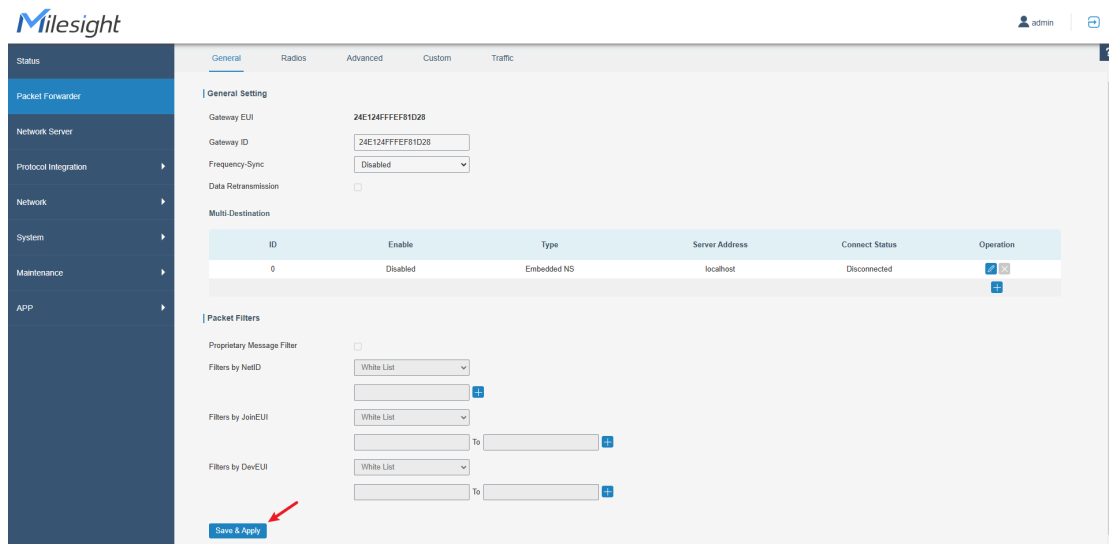
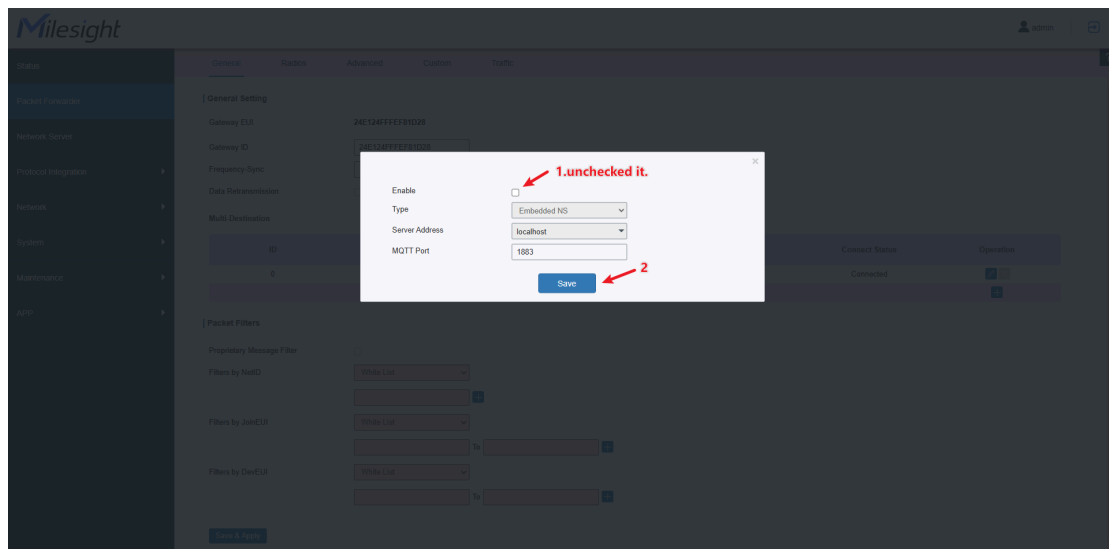


At this stage, the gateway has been added, but its status will appear red (**Offline**). This is normal. Next, we need to configure the UG65 gateway parameters.

4. Configure Packet Forwarder Parameters

First, log in to the UG65 management interface and disable the built-in LNS by following the steps shown in the image below:

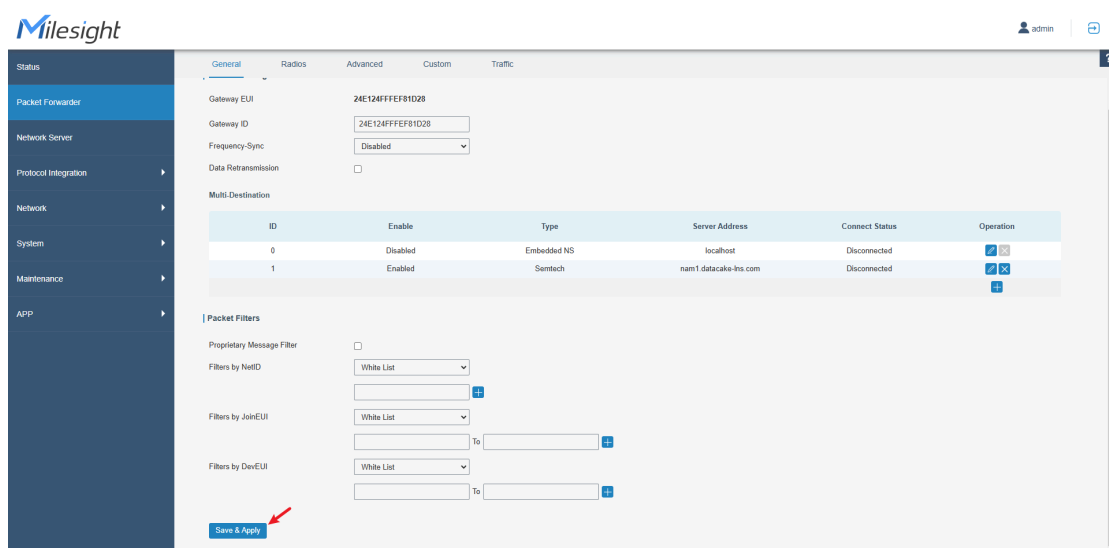
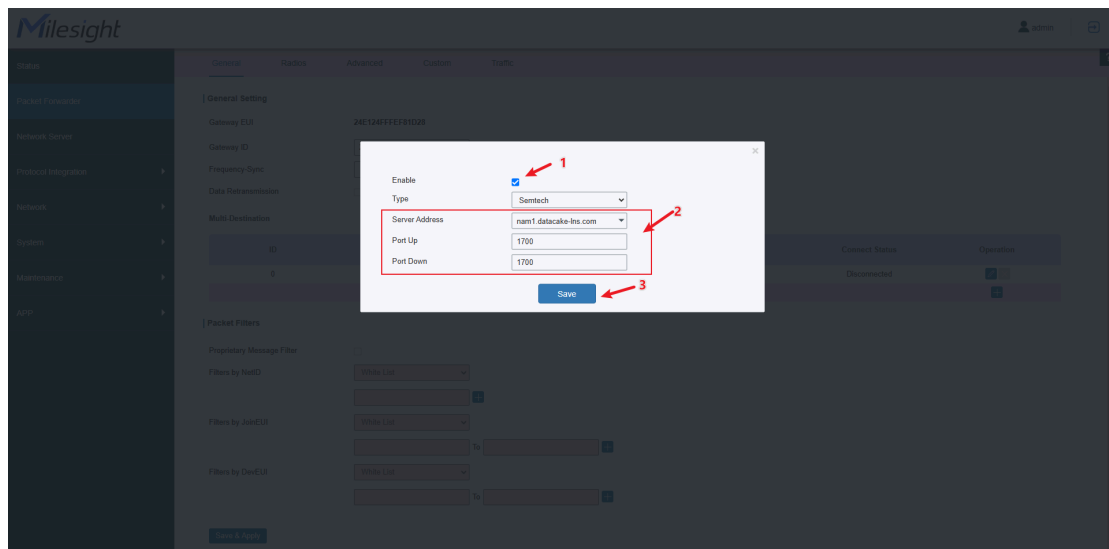
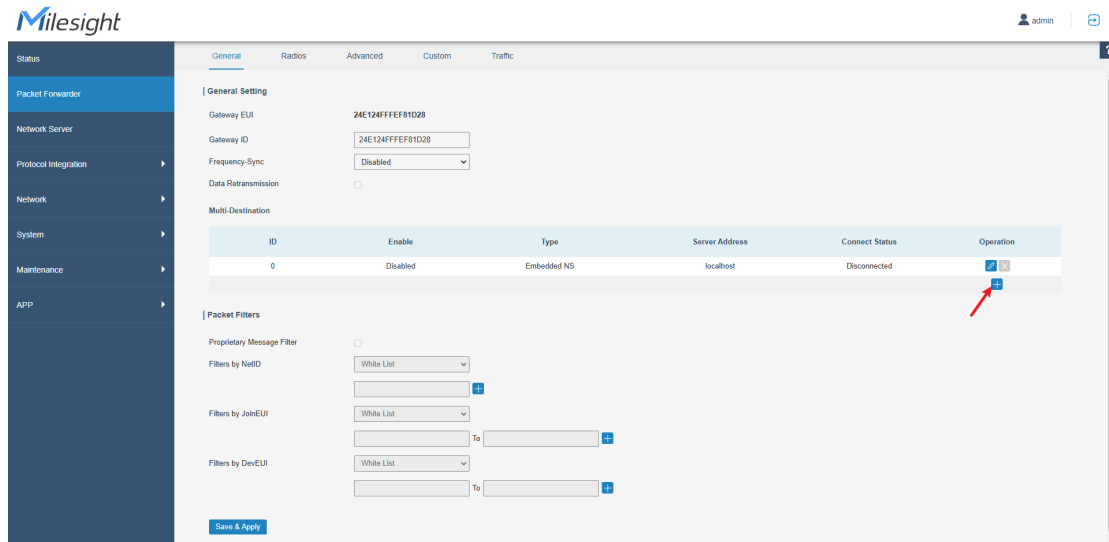




After a short wait, the Embedded NS status will show **Disconnected**, indicating that the built-in LNS has been successfully disabled.

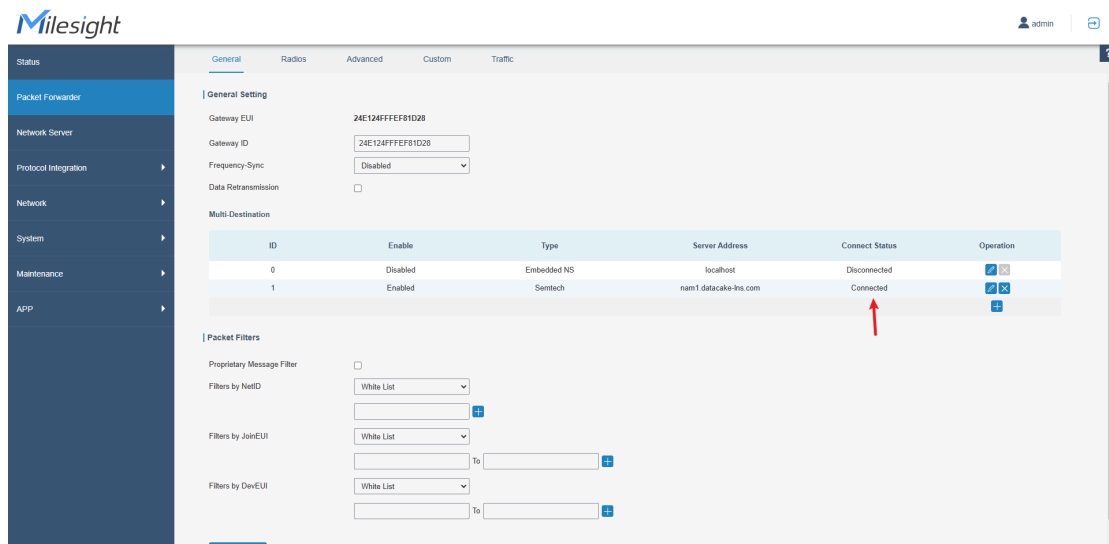
Next, configure the Datacake LNS address by following these steps:





After a short wait, if the **Semtech** section displays **Connected**, it means the UG65 gateway has successfully connected to the Datacake LNS platform, as shown below:





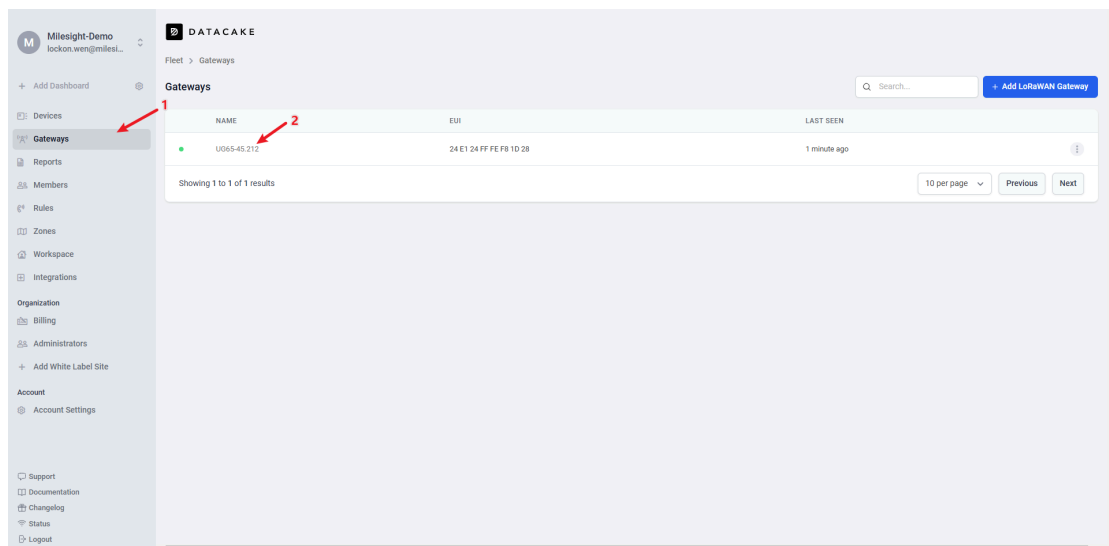
At this point, the gateway configuration is complete.

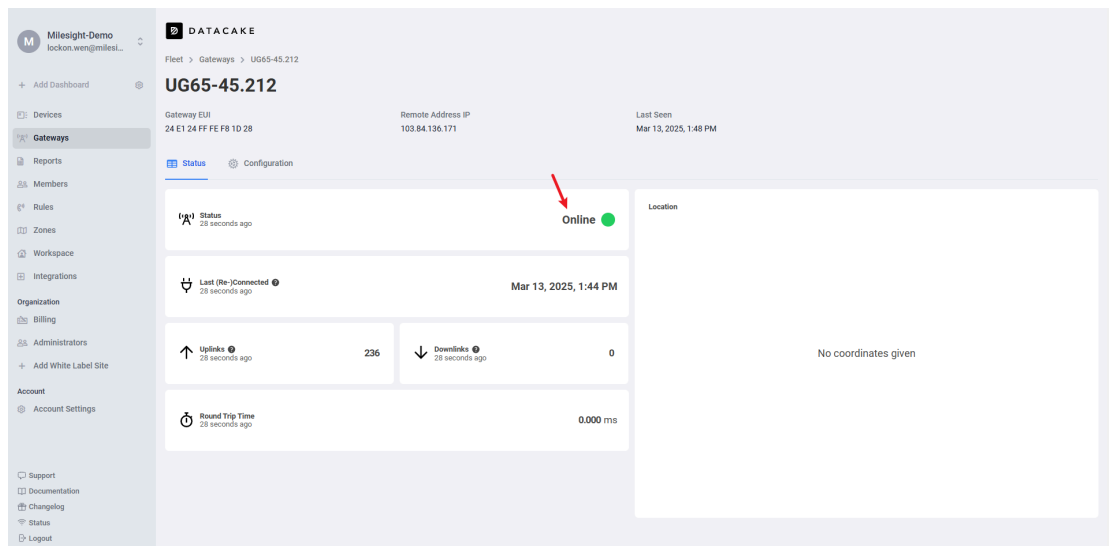
Note:

If the gateway continues to show no connection, refer to < [Fail to Access the Network of Milesight Gateway](#) > to troubleshoot the gateway's internet connectivity. Ensure that the gateway has access to the internet.

5. Add a Sensor Device to the Platform

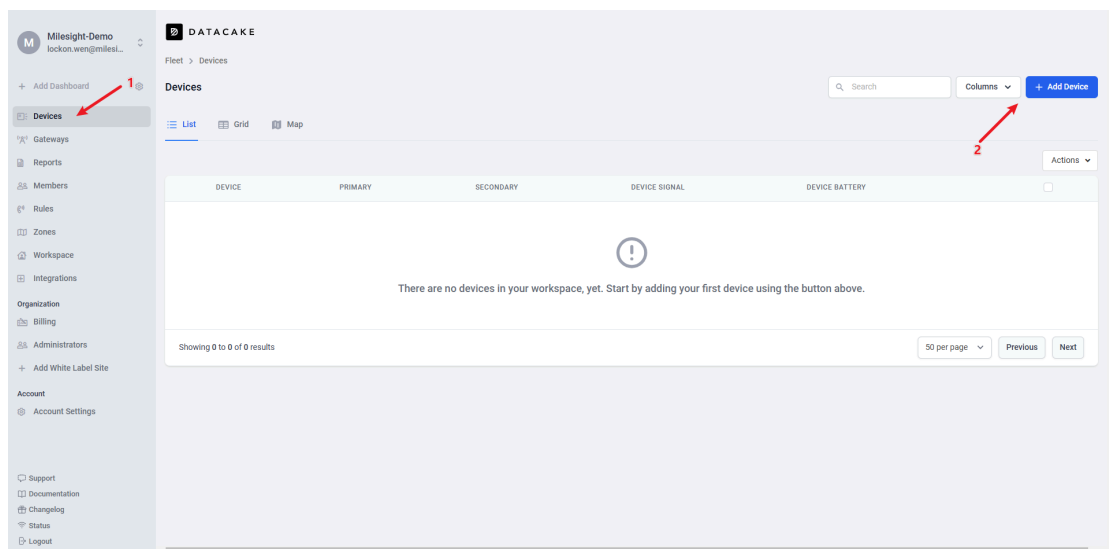
First, check whether the gateway has successfully come **online**, as shown below:





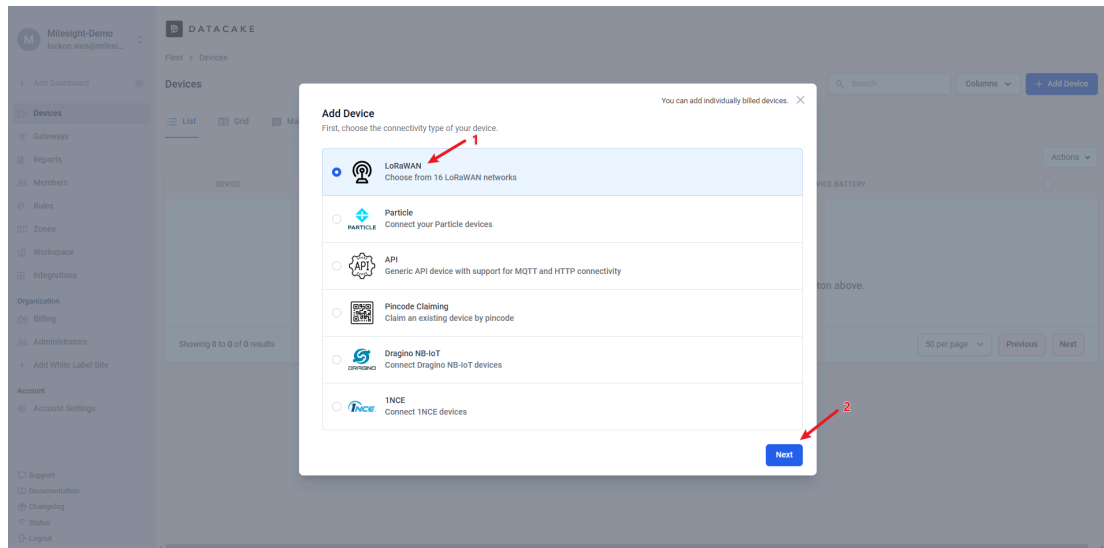
If the Status appears green (Online), it means the gateway has been successfully added.

Next, proceed with adding the AM319 sensor device by following these steps:

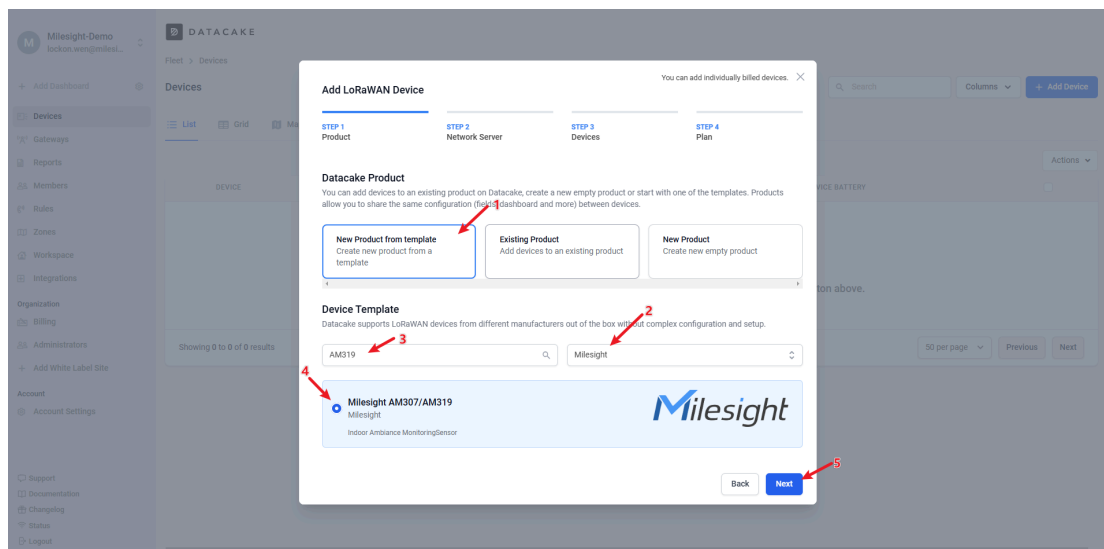


In the pop-up window, select the **LoRaWAN** option:



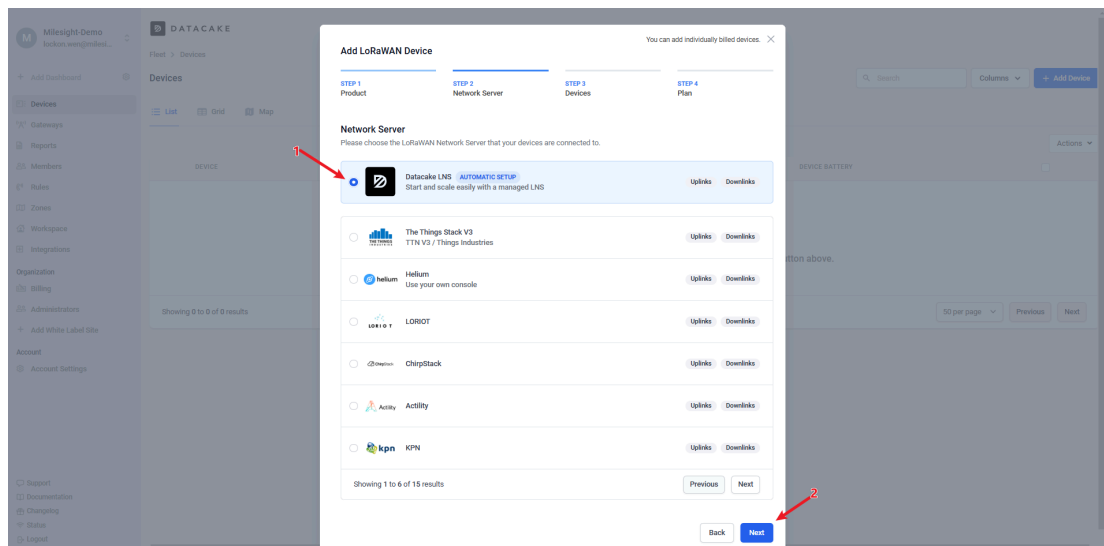


On the next screen, enter **Milesight** in the search bar and then type **AM319**. The platform will display the built-in device information. Select it and click **Next**:



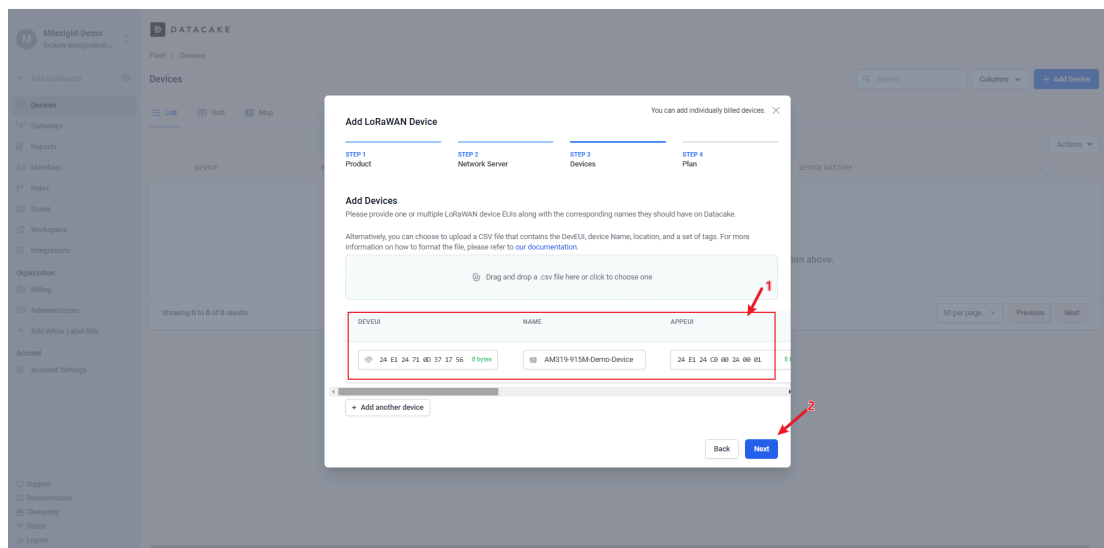
Since we are using Datacake as the LNS, select the appropriate option as shown:





Next, enter the LoRa parameters of the sensor.

These details can be obtained using the PC version of the ToolBox software:



Milesight ToolBox V7.0.14

Power Off

Basic **Channel**

Device EUI: 24E124710D371756

App EUI: 24E124C0002A0001

Application Port: 85

Join Type: OTAA

LoRaWAN Version: V1.0.3

Class Type: Class C

Application Key: 5572404C696E6B4C6F52613230654309

RX2 Data Rate: DR0 (SF12, 125 kHz)

RX2 Frequency: 923300000

Spread Factor: SF8-DR2

Confirmed Mode: ☒

Rejoin Mode: ☒

Set the number of packets sent: 32 packets

ADR Mode: ☒

TXPower: TXPower0-22 dBm

Save

Firmware Version: 01.03 Hardware Version 2.1

Click **Next**, then choose the appropriate plan.

Since this guide uses the Free version, you may select the option that best suits your needs:

Milesight-Demo **DATA CAKE**

Next > Devices

Devices

STEP 1 Product STEP 2 Network Server STEP 3 Devices STEP 4 Plan

Individual device plans Organization plan New

Free €0.00 / month
7 days data retention
500 datapoints / day
max 5 per workspace
Cancel any time

Light €1.00 / month
1 month data retention
1,000 datapoints / day
Cancel any time

Standard €3.00 / month
3 month data retention
2,500 datapoints / day
Cancel any time

Plus €5.00 / month
12 month data retention
7,500 datapoints / day
Cancel any time

Have a code?

M

Milesight-Demo

lockon.wen@milesi...

+ Add Dashboard

Devices

Gateways

Reports

Members

Rules

Zones

Workspace

Integrations

Organization

Billing

Administrators

+ Add White Label Site

Account

Account Settings

Support

Documentation

Changelog

Status

Logout

DATA CAKE

Fleet > Devices

Devices

Columns

+ Add Device

1 device have been added successfully.

ListGridMap

Actions

DEVICE	PRIMARY	SECONDARY	DEVICE SIGNAL	DEVICE BATTERY	
AM319-913M-Demo-Device	N/A	N/A	N/A	N/A	

Showing 1 to 1 of 1 results

50 per pagePreviousNext

At this stage, the AM319 device has been successfully added.

Wait for approximately 3-5 minutes, then refresh the interface. If the device status changes from gray to green, it means that the AM319 has come online:

M

Milesight-Demo

lockon.wen@milesi...

+ Add Dashboard

Devices

Gateways

Reports

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Rules

Zones

Workspace

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Organization

Billing

Administrators

+ Add White Label Site

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DATA CAKE

Fleet > Devices

Devices

Columns

+ Add Device

1 device have been added successfully.

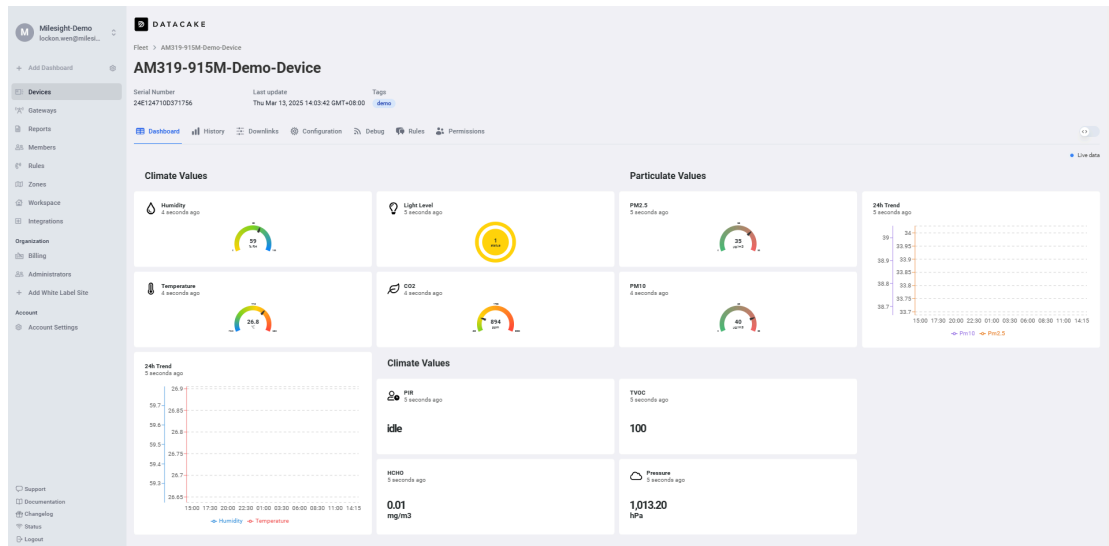
ListGridMap

Actions

DEVICE	PRIMARY	SECONDARY	DEVICE SIGNAL	DEVICE BATTERY	
AM319-913M-Demo-Device	26.7 °C	60 %RH	N/A	0 %	

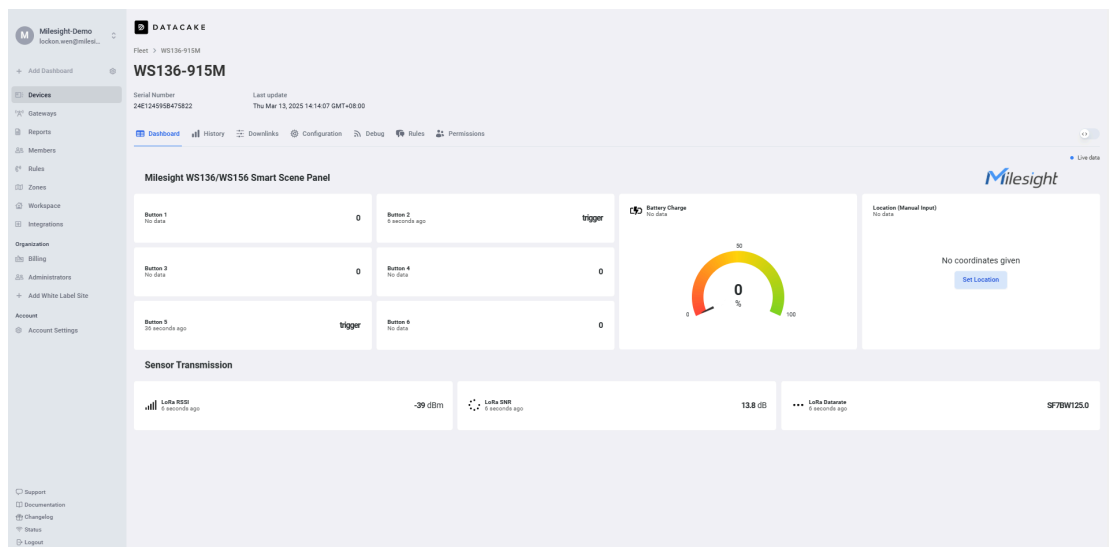
Showing 1 to 1 of 1 results

50 per pagePreviousNext



Now, the AM319 device has been successfully added, and its real-time data can be reported to the Datacake platform.

Similarly, other devices such as WS136 and UC100 can also be added using the same method, as shown in the image below:



M

Milesight-Demo

lockun.weng@unikel...

+ Add Dashboard

Devices

Gateways

Reports

Members

Rules

Zones

Workspace

Integrations

Organization

Billing

Administrators

+ Add White Label Site

Account

Account Settings

Support

Documentation

Changelog

Status

Logout

DATAKE

Fleet > UC100

UC100

Serial Number
24E124488022584

Last update
Thu Mar 13, 2025 14:22:14 GMT+08:00

Dashboard

History

Download

Configuration

Debug

Rules

Permissions

Live data

Milesight UC100 Controller

Modbus Channel 1
No data

0

Modbus Channel 2
No data

0

Modbus Channel 3
No data

0

Modbus Channel 4
No data

0

Modbus Channel 5
No data

0

Modbus Channel 6
No data

0

Modbus Channel 7
No data

0

Modbus Channel 8
No data

0

Modbus Channel 9
No data

0

Modbus Channel 10
No data

0

Modbus Channel 11
No data

0

Modbus Channel 12
No data

0

Modbus Channel 13
No data

0

Modbus Channel 14
No data

0

Modbus Channel 15
No data

0

Modbus Channel 16
No data

0

Manual location
No data

No coordinates given

Set Location

Sensor transmission

LoRa RSSI
15 seconds ago

-17
dBm

LoRa SNR
10 seconds ago

13
dB

-END-

