

如何将 Milesight 的网关和设备集成到 Netmore Group 平台



Version Change Log			
Version	Revision Date	Revision Details	Revised By
V1.0	20250416	Initial	Lockon



前言

Netmore Group 是一家总部位于瑞典斯德哥尔摩的全球物联网（IoT）网络运营商，成立于 2010 年，专注于构建和运营基于 LoRaWAN® 技术的低功耗广域网（LPWAN）基础设施。公司致力于为公用事业、房地产、工业和企业客户提供高可靠性、可扩展的连接解决方案，推动数字化转型和可持续发展。

截至 2025 年，Netmore 的网络已覆盖 17 个国家，连接超过 230 万台设备，部署了 20,000 多个网关，成功实施了 800 多个项目。其服务涵盖欧洲、北美、亚太、中东、拉丁美洲和非洲等地区。2024 年，公司通过收购美国 LoRaWAN 运营商 Senet，进一步巩固了其在全球市场的地位，并宣布进军亚太市场，满足对传感器驱动的公用事业和市政基础设施监控以及能源管理解决方案日益增长的需求。

Netmore 提供多种服务模式，包括公共和私有 LoRaWAN 网络部署、平台即服务（PaaS）以及与主流云平台（如 Microsoft Azure IoT Hub 和 AWS IoT Core）的无缝集成。其网络架构采用星型拓扑结构，支持双向通信、端到端加密和多租户管理，保障数据安全和系统稳定性。此外，Netmore 的 LoRaWAN 门户提供网关和设备的集中管理，支持自动故障切换和实时监控，确保网络的高可用性和性能。

作为 LoRa Alliance 的成员，Netmore 积极参与全球物联网生态系统的构建，与 200 多家合作伙伴共同推动智慧城市、智能水务、能源监测、资产追踪等应用场景的落地，助力客户实现资源节约、成本降低和运营效率提升。

本文主要介绍如何使用 UG65 网关对接 Netmore 平台，并且在 Netmore 平台上添加 AM103（注意这里 AM103 仅做示例，读者可以根据实际情况更换成自己的设备进行操作，也是可以的）设备作为示例的完整操作过程。

1. 前置条件

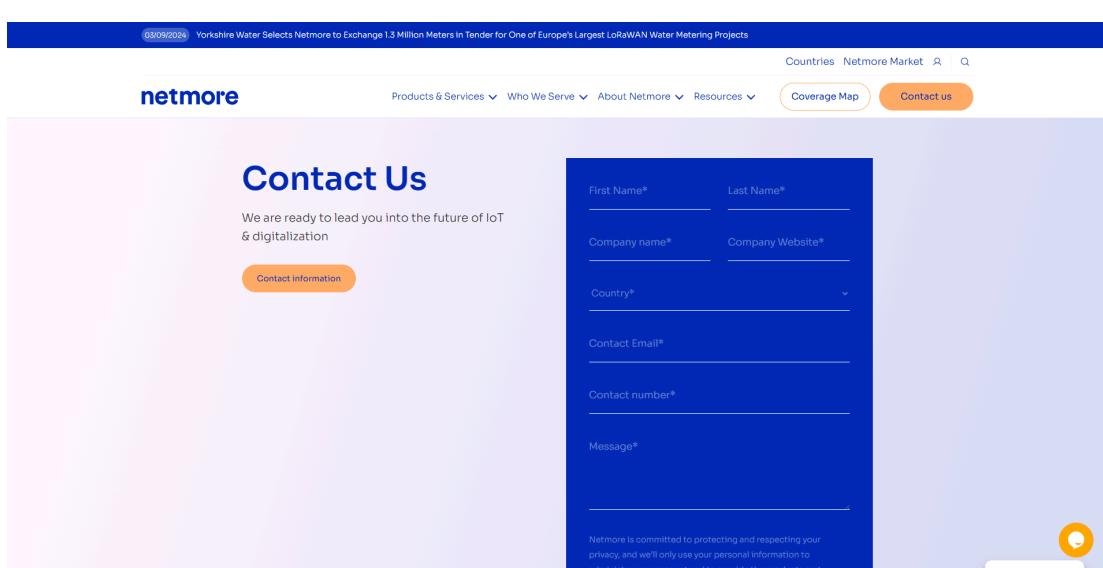
- 网关型号：UG65 或者 UG56、UG67 也可以
- 传感器型号：AM103
- 本文演示用到的频段：EU868

2. 平台账号申请

首先，访问 <https://netmoregroup.com/>：



在界面上点击“**Contact us**”填写申请信息即可：



填写好信息后，网站会根据你的请求内容创建账号，留意邮箱信息即可。

3. 首次登录

访问地址 <https://portal.blink.services/login> 填写账号密码等信息，点击“LOGIN”即可：



一般情况下，网站会根据读者的情况默认创建 Network Providers 和 Service Providers，如图所示：



Network Provider 信息如下：

The screenshot shows the 'Information' section of the Milesight Network Provider configuration. Key details include:

- Name: Milesight Q
- Code: MILESGHT
- Active: Yes
- Created: 2024/02/24 20:23:29
- Created By: Martin Flenhagen (martin.flenhagen@netmoregroup.com)
- Organization: Milesight
- Network: Enterprise PaaS (EU)
- Valid Frequency Plans: EU868-1 (8ch) (867.1-868.5)
- Default Network Server: LNS-EU-N1
- Users: Nicholas Cao (nicholas.cao@milesight.com), Lockon Wen (lockon.wen@milesight.com)
- Distribute Admin - Users: No Value

Below the information is a 'Notification e-mail' section with a placeholder 'Enter e-mail address'. The 'Contacts' section shows 'No Contacts'. The 'Description' section is labeled 'Missing'.

Service Provider 信息如下：

The screenshot shows the 'Information' section of the Milesight Service Provider configuration. Key details include:

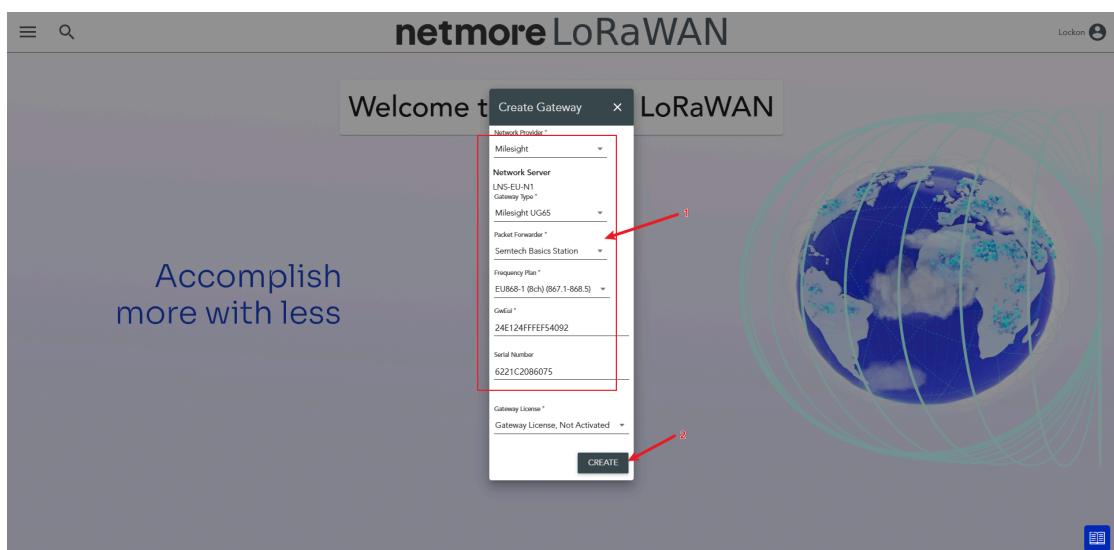
- Name: Milesight Q
- Code: MILESGHT
- Active: Yes
- Created: 2024/02/24 20:23:48
- External Reference: Missing
- Created By: Martin Flenhagen (martin.flenhagen@netmoregroup.com)
- Organization: Milesight
- Network: Enterprise PaaS (EU)
- Default Channel Plan: Netmore Default
- Available Products: Netmore Default
- Default Product: Netmore Default
- Default Network Server: LNS-EU-N1
- Invoice: No
- Billing Method: Provisioned
- Users: Nicholas Cao (nicholas.cao@milesight.com), Lockon Wen (lockon.wen@milesight.com)
- Sensor Admin - Users: Nicholas Cao (nicholas.cao@milesight.com), Lockon Wen (lockon.wen@milesight.com)
- Distribute Admin - Users: Nicholas Cao (nicholas.cao@milesight.com)
- Customers: None

Below the information are sections for 'Subscription Distributors' (No distributors) and 'Subscription Buyers' (No buyers). The 'Description' section is labeled 'Saving...'.

至此，账号状态是可用的，我们的账号的初步检查就结束了。

4. 创建网关

如图进行操作即可：



注意：

- 这里平台目前暂时只支持 EU868 频段的
- 本次使用的是平台的 Basic Station 的连接方式，如图配置即可
- 其余参数，请根据实际情况填写

至此，平添上面创建网关的操作就结束了，接下来开始登录到我们网关的管理界面，开始配置相关参数。

5. 网关配置

5.1. 禁用内置 NS

首先登录网关的管理界面，禁用内置的 LNS 功能，如下图操作即可：

Milesight

Status

Packet Forwarder 1

Network Server

Protocol Integration

Network

System

Maintenance

APP

General Radios Advanced Custom Traffic

General Setting

Gateway EUI	2AE124FFFEF54092
Gateway ID	2AE124FFFEF54092
Frequency-Sync	2
Data Retransmission	<input type="checkbox"/>

Multi-Destination

ID	Enable	Type	Server Address	Connect Status	Operation
0	<input checked="" type="checkbox"/>	Embedded NS	localhost	Disconnected	3 Edit Delete Add
1	<input type="checkbox"/>				Edit Delete Add
2	<input type="checkbox"/>				Edit Delete Add

Packet Filters

Proprietary Message Filter

Filters by NetID White List Edit

Filters by JoinEUI White List Edit

Filters by DevEUI White List Edit

Milesight

Status

Packet Forwarder

Network Server

Protocol Integration

Network

System

Maintenance

APP

General Radios Advanced Custom Traffic

General Setting

Gateway EUI	2AE124FFFEF54092
Gateway ID	2AE124FFFEF54092
Frequency-Sync	
Data Retransmission	<input type="checkbox"/>

Multi-Destination

ID	Enable	Type	Server Address	Connect Status	Operation
0	<input checked="" type="checkbox"/>	MQTT Port	localhost	Disconnected	1.uncheck it. Edit Delete Add
1	<input type="checkbox"/>				Edit Delete Add
2	<input type="checkbox"/>				Edit Delete Add

Packet Filters

Proprietary Message Filter

Filters by NetID White List Edit

Filters by JoinEUI White List Edit

Filters by DevEUI White List Edit

Enable
Type Embedded NS
Server Address localhost
MQTT Port 1883
Save 2. Click to save.

5.2. 配置包转发参数

接下来配置包转发地址，根据 [Netmoregroup Portal Docs](#) 的内容我们可以获取到相关的关键参数，如下图所示：

Semtech Basics Station – Netmoregroup Verified Gateways

Netmoregroup seamlessly supports Standard Semtech Basics Station integrations and will work with most Basics Stations equipped Base Stations even if it is not listed in the below table.

The Semtech Basics Station is configured via multiple files or through a user interface depending on the Base Station manufacturer and/or the Base Station firmware version. For full details please read the [Generic Basics Station page](#).

Below are the generic requirements to configure a Secured Basics Station to operate with the Netmoregroup LoRaWAN Network Server.

Key	Value	Location	Description
EUI or routefid	XXXX-XXXX-XXXX-XXXX	station.conf	Base Station EUI, provided by Netmoregroup upon completion of Base Station registration. Also called Manufacturer EUI.
LNS URI (*secured)	wss://ns-gw.netmoregroup.com:6042	lcn uri	Note the port, if configuring through a UI you may need to set this separately. Requires TLS Certificate
TLS Certificate	Provided by Netmoregroup	lc trust	This file is provided by Netmoregroup and is required to be used with the secured URL. Download the Server Certificate

MDS: 71db01c5d0e10acc39e5915ca0aa1c

A common configuration checklist is listed below.

Some steps listed may not be required for all Base Station vendors and models but the steps are listed roughly chronological order.

- Ensure the correct port is selected for the Netmoregroup network.
- Disable any packet forwarding software that may be already running.
- Ensure to select the [Semtech Basic Station](#) packet forwarder type during Netmoregroup Registration.
- Netmoregroup currently supports [LNS](#) connection method
 - cups mode options should not be utilized.
 - If given the choice to pick the LNS connection type, the [secured](#) version is recommended.
 - The URL can be entered in various forms, if configuring through a UI you may need to set the port separately. Some examples for the secured variant are:
 - wss://ns-gw.netmoregroup.com:6042
 - URI: wss://ns-gw.netmoregroup.com:6042 Port: 6042
 - Connection type: [Secured URI](#): ns-gw.netmoregroup.com Port: 6042
 - Using the [Secured URI](#) value requires a TLS certificate to be provided.

把里面的 **LNS 地址** 和 **下载的 CA 证书** 配置到网关即可，操作参考下图：

Enable

Type: Basics Station

Connecting to an LNS

URI: wss://ns-gw.netmoregroup.com:6042

CA File(*.trust): lc trust

Client Certificate File(*.crt):

Client Key File(*.key):

Save

稍等片刻，检查 Basic Station 状态为已连接：

ID	Enable	Type	Server Address	Connect Status	Operation
0	Disabled	Embedded NS	localhost	Disconnected	
2	Enabled	Basics Station	-	Connected	

6. 激活网关

回到我们的 Netmore 的界面，如下图操作即可：

The screenshot shows the 'netmore LoRaWAN' dashboard. On the left, a vertical navigation menu is open, displaying various options under categories like Network Provider, Service Provider, and Administration. The 'Search Gateway' option under Network Provider is highlighted with a red arrow. The main content area features a globe graphic with text overlaying it: 'Welcome to Netmore LoRaWAN' and 'Accomplish more with less'.

The screenshot shows the 'Search Gateway' page. At the top, there's a search bar labeled 'Search Gateway'. Below it is a table with columns for Gateway Id, Alias, Serial Number, MAC, GwEui, Gateway Type, Network Provider, Status Notification, and Category. There are dropdown filters for each column. Further down, there are sections for 'Connected' status, 'Street Name', 'Active' status, and 'Tags'. At the bottom, there are 'CLEAR' and 'SEARCH' buttons, with the 'SEARCH' button highlighted by a red arrow.

netmore LoRaWAN

Gateway Id	Alias	Created	Serial Number	Active	Installed	Installation Changed	Provisioned	Provision Changed	Connected	Connected Changed	Status Primary	Primary Changed	Status Secondary	Secondary Changed	Map	Gateway Type
28443	45.241	2025/3/11 15:51:53	622FC2086075	Active	Not Installed		Provisioned	2025/3/11 15:54:00	Online	2025/4/15 14:32:34	Not Available	2025/3/11 15:51:53	Not Available	2025/3/11 15:51:53		UG6

ADD ALL TO BATCH LIST

根据 SN 信息，定位到我们刚刚添加的网关，点击进去：

LoRaMac
Created: 2025/3/11 15:51:53

Communication
Connected: Online 2025/4/15 14:32:34
↳ Status Primary: Not Available 2025/3/11 15:51:53
↳ Status Secondary: Not Available 2025/3/11 15:51:53
Remote Access: Unknown

Owner
Network Provider: Milesight
Gateway License: Gateway License, Not Activated

Status
Active: Yes
Provisioned: No 2025/4/16 11:43:26
Installed: No

Connections
Primary Connection: Missing
↳ Status Monitoring: No
Secondary Connection: Missing
↳ Status Monitoring: No
MAC: Missing
IMEI: Missing
ICCID: Missing
IMSI: Missing

Monitoring
Excluded from monitoring: No
Status Notification: Use Gateway License monitoring

Provisioning
Network Server: LNS-EU-N1
Gateway Type: Milesight UG65
Category: Outdoor
Manufacturer: Milesight
Packet Forwarder: Semtech Basics Station
Frequency Plan: EU868-1 (8ch) (867.1-868.5)

PROVISION **INFORMATION**

Description

点击“PROVISION”按钮，稍等片刻：

LoRaMac
Created: 2025/3/11 15:51:53

Communication
Connected: Online 2025/4/15 14:32:34
↳ Status Primary: Not Available 2025/3/11 15:51:53
↳ Status Secondary: Not Available 2025/3/11 15:51:53
Remote Access: Unknown

Owner
Network Provider: Milesight
Gateway License: Gateway License, Not Activated

Status
Active: Yes
Provisioned: Yes 2025/4/16 11:43:53
Installed: No

Connections
Primary Connection: Missing
↳ Status Monitoring: No
Secondary Connection: Missing
↳ Status Monitoring: No
MAC: Missing
IMEI: Missing
ICCID: Missing
IMSI: Missing

Monitoring
Excluded from monitoring: No
Status Notification: Use Gateway License monitoring

Provisioning
Network Server: LNS-EU-N1
Gateway Type: Milesight UG65
Category: Outdoor
Manufacturer: Milesight
Packet Forwarder: Semtech Basics Station
Frequency Plan: EU868-1 (8ch) (867.1-868.5)

UNPROVISION **INFORMATION**

Description

Provisioning Successful

OK

点击“OK”即可完成网关的激活，至此，我们的网关和 Netmore 的数据链路就已经搭建完成了，参考下图进行参数检查即可：

7. 添加 sensor

接下来，我们用 AM103 进行演示，请参考下面的截图进行操作即可：

如图填写参数即可，注意此时只是预配置，AppKey 等信息需要稍后配置。
创建完毕后，如图进行搜索：

根据设备的 SN 信息，定位到我们刚刚添加的 AM103 设备，点击进去开始剩余参数的配置即可：

netmore LoRaWAN

Search Sensor

DevEUI	Alias	Created	Serial Number	Active	Provisioned	Provision Changed	Installed	Installation Changed	Installer	Fixed Position	Map	Activation Method	Class	LoRaWAN Version	Sensor Type	Manufacturer
2AE124725E286203	Lockon-Test-Device	2025/4/15 14:50:19	6726E28620340017	Active	Not Provisioned	2025/4/16 11:52:00	Installed	2025/4/15 15:09:39			OTAA	Class A	1.0.3	Milesight (AM103)	Milesight	

Latest Communication Latest Join

<https://portal.blink.services/net/sensors/2AE124725E286203>

Information

DevEUI: 2AE124725E286203
 Alias: Lockon-Test-Device
 Created: 2025/4/15 14:50:19
 Serial Number: 6726E28620340017
 Sensor Type: Milesight (AM103)
 Manufacturer: Milesight
 Fixed Position: Not Set
 Network Server: LNS-EU-N1

Status:
 Active: Yes
 Provisioned: No
 Installed: Yes 2025/4/15 15:09:39

Communication:
 Latest Communication: 2025/4/16 11:51:47
 First Communication: 2025/4/15 15:08:33
 Latest Join Request: 2025/4/15 15:08:25
 Latest Join Accept: 2025/4/15 15:08:25

Export:
 Export Config: http push test
 Export Topic: Disabled
 Export Profile: No

Provisioning:
 Activation Method: OTAA - Over the Air Activation
 Class: Class A
 LoRaWAN Version: 1.0.3
 Channel Plan: EU868
 Billing Group: Up to 144 messages/day
 Product: Netmore Default
 AppEUI: 2AE124C0002A0001
 Device Profile: Missing
 DevAddr: 12469A08
 External Join Server: Not Set
 AppKey: 5572404C696E6B4C6F52613230999909

Service Provider: Milesight (AM103)
 Customer: Missing

PROVISION

Information

DevEUI: 2AE124725E286203
 Alias: Lockon-Test-Device
 Created: 2025/4/15 14:50:18
 Serial Number: 6726E28620340017
 Sensor Type: Milesight (AM103)
 Manufacturer: Milesight
 Fixed Position: Not Set
 Network Server: LNS-EU-N1

Status:
 Active: Yes
 Provisioned: Yes 2025/4/16 11:54:10
 Installed: Yes 2025/4/15 15:09:39

Communication:
 Latest Communication: 2025/4/16 11:51:47
 First Communication: 2025/4/15 15:08:33
 Latest Join Request: 2025/4/15 15:08:25
 Latest Join Accept: 2025/4/15 15:08:25

Export:
 Export Config: http push test
 Export Topic: Disabled
 Export Profile: No

Provisioning:
 Activation Method: OTAA - Over the Air Activation
 Class: Class A
 LoRaWAN Version: 1.0.3
 Channel Plan: EU868
 Billing Group: Up to 144 messages/day
 Product: Netmore Default
 AppEUI: 2AE124C0002A0001
 Device Profile: Missing
 DevAddr: 12469A08
 External Join Server: Not Set
 AppKey: 5572404C696E6B4C6F52613230999909

Service Provider: Milesight (AM103)
 Customer: Missing

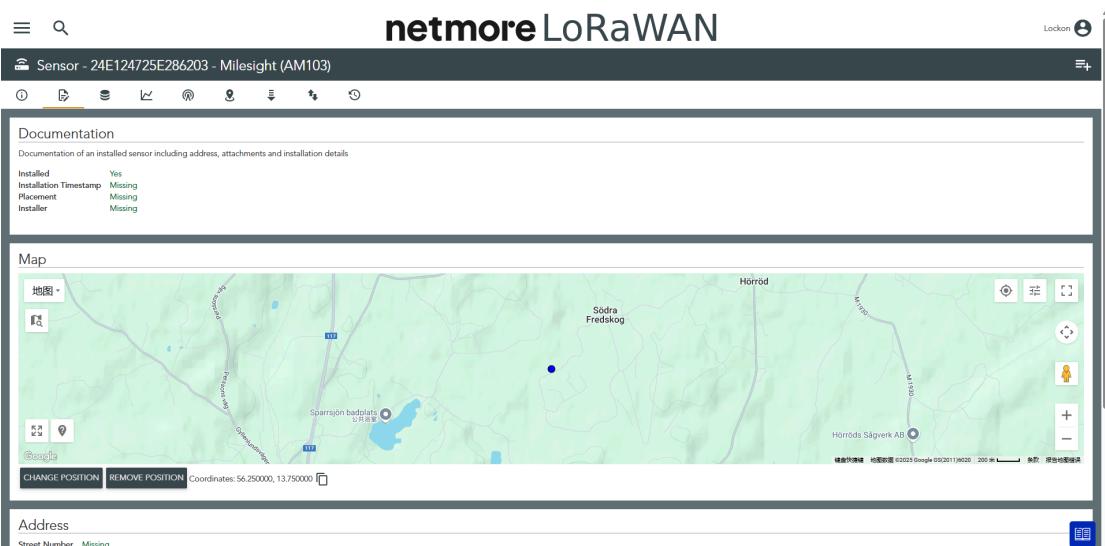
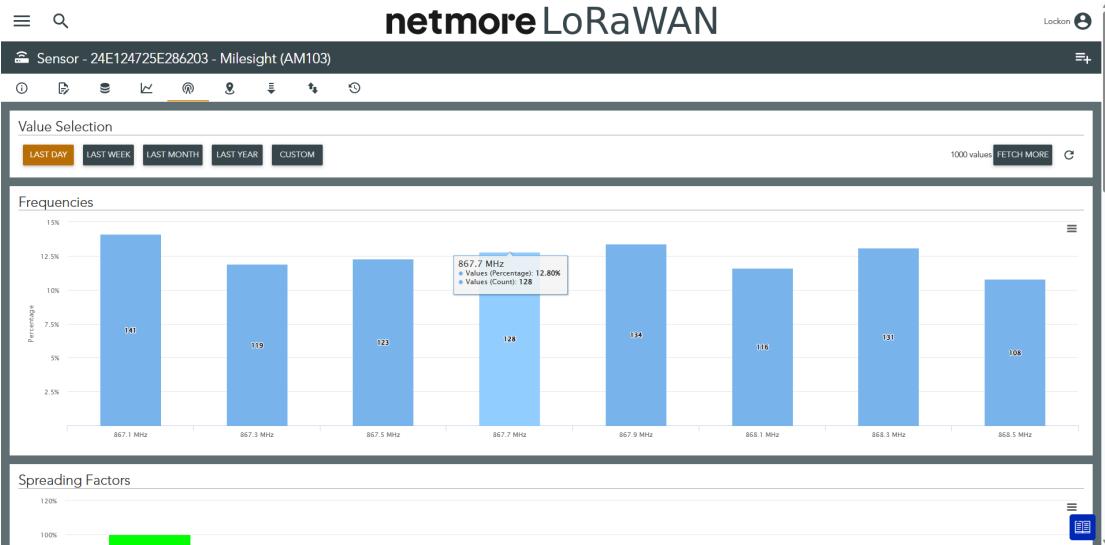
UNPROVISION **INFORMATION**

Coordinates: 56.250000, 13.000000

Provisioning Successful

OK

稍等片刻，如图操作，检查我们添加后的 AM103 的数据上报情况：



netmore LoRaWAN

Sensor - 24E124725E286203 - Milesight (AM103)

Value Selection

LAST DAY LAST WEEK LAST MONTH LAST YEAR CUSTOM 1000 values **FETCH MORE**

Values

Comm. Timestamp	FCnt	SpFact	DR	RSSI	SNR	Gateway	Payload (Hex)	Payload
2025/4/16 11:51:47	1312	7	5	-52 dBm	13.25 dB	28443 -45.241	01756303670501046859077d5e02	01756303670501046859077d5e02
2025/4/16 11:50:44	1311	7	5	-53 dBm	10.25 dB	28443 -45.241	01756303670501046858077d5a02	01756303670501046858077d5a02
2025/4/16 11:49:43	1310	7	5	-52 dBm	13.5 dB	28443 -45.241	01756303670501046858077d5e02	01756303670501046858077d5e02
2025/4/16 11:48:43	1309	7	5	-52 dBm	10.5 dB	28443 -45.241	01756303670501046859077d9b02	01756303670501046859077d9b02
2025/4/16 11:47:43	1308	7	5	-53 dBm	11.5 dB	28443 -45.241	01756303670501046859077d9e02	01756303670501046859077d9e02
2025/4/16 11:46:45	1307	7	5	-52 dBm	14.4 dB	28443 -45.241	0175630367060104685a077d6602	0175630367060104685a077d6602
2025/4/16 11:45:45	1306	7	5	-52 dBm	13.75 dB	28443 -45.241	01756303670601046858077d6602	01756303670601046858077d6602
2025/4/16 11:44:41	1305	7	5	-53 dBm	11.5 dB	28443 -45.241	0175630367050104685b077d9e02	0175630367050104685b077d9e02
2025/4/16 11:43:46	1304	7	5	-52 dBm	11.75 dB	28443 -45.241	0175630367050104685b077d9e02	0175630367050104685b077d9e02
2025/4/16 11:42:45	1303	7	5	-53 dBm	13.5 dB	28443 -45.241	0175630367050104685c077d9e02	0175630367050104685c077d9e02

Sensor type specific values Additional values

1 2 3 4 5 31 Count: 10 / 1000

特别说明：由于我们默认申请的是 Netmore Try 权限的账号，所以看不到 AM103 设备

decode 之后的数据，如果想要检查 decode 之后的数据，请联系 Netmore 官方付费升级成 Netmore GO 权限就可以了。

The screenshot shows the Netmore website interface. At the top, there's a banner with the text "03/09/2024 Yorkshire Water Selects Netmore to Exchange 1.5 Million Meters In Tender for One of Europe's Largest LoRaWAN Water Metering Projects". Below the banner, the Netmore logo is on the left, and a navigation bar with links like "Products & Services", "Who We Serve", "About Netmore", "Resources", "Coverage Map", and "Contact us".

The main content area displays four service categories: "Netmore TRY" (From €0 / month), "Netmore GO" (From €180 / year), "Netmore NaaS" (Price per device and month), and "Netmore PaaS" (Price per device and month). Each category has a "Try now" or "Explore" button.

A table below lists various features with corresponding icons:

	Netmore TRY	Netmore GO	Netmore NaaS	Netmore PaaS
European Macro Network Access	●	●	●	●
Rental Gateway (if needed)	●	●	—	—
Purpose-built Project Coverage	—	●	●	—
Private Network	—	—	—	●
Device and Gateway Management Functionality	—	●	●	●
Batch Sensor Deployment	—	●	●	●
Radio Planning Tool & Network Diagnostics	—	—	●	●
Easy Device Onboarding	—	●	●	●
Revenue Management & Reporting	—	—	●	●
Data Decoding and Visualization	—	●	—	—
End-to-End Encryption	●	●	●	●
Geo Redundancy	●	●	●	●
Data Retention & Storage	●	●	●	●
Service Level Agreements (SLA)	—	—	●	●

A red arrow points to the "Data Decoding and Visualization" row in the table. A small orange circular icon is located on the right side of the page.

另外，读者可以根据实际情况配置 Sensor 的 GPS 等信息。

至此，我们的网关和设备已经成功对接到了 Netmore 平台，并且实现了数据的实时传输。

-END-