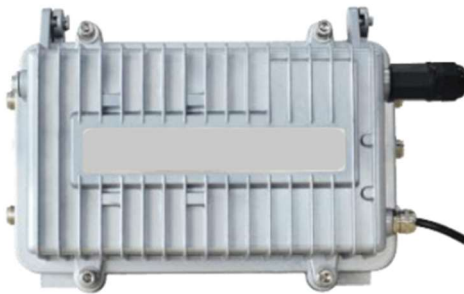


LoRa/LoRaWAN Gateway Test Instructions

--Built-in NS



Fandesensor

Web: www.fandesensor.com

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TEL/WhatsApp: +86 15902990387

Gateway Configuration

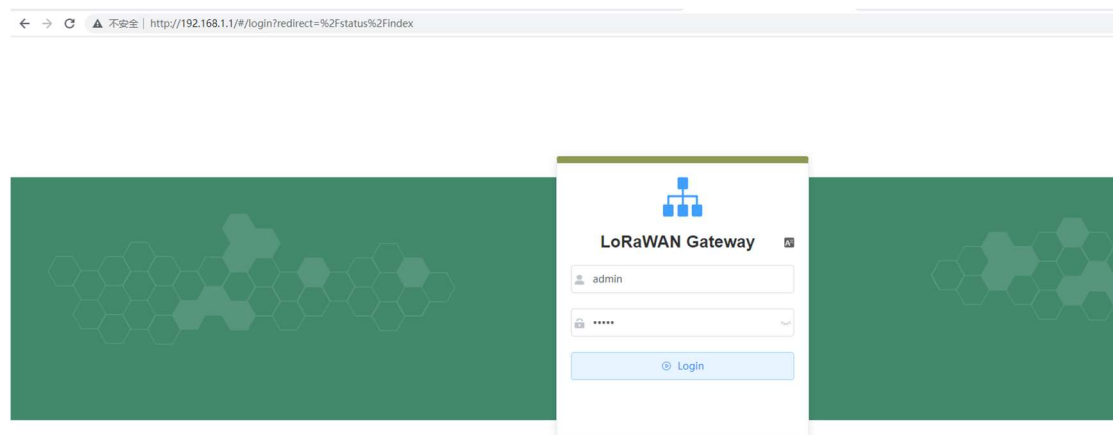
➤ Connect method 1, connect computer by a cable.

After connecting the lorawan gateway to the power supply, use a network cable to connect the RJ45 port of the computer and the LAN port of the gateway. The computer network card needs to be configured into automatic acquisition

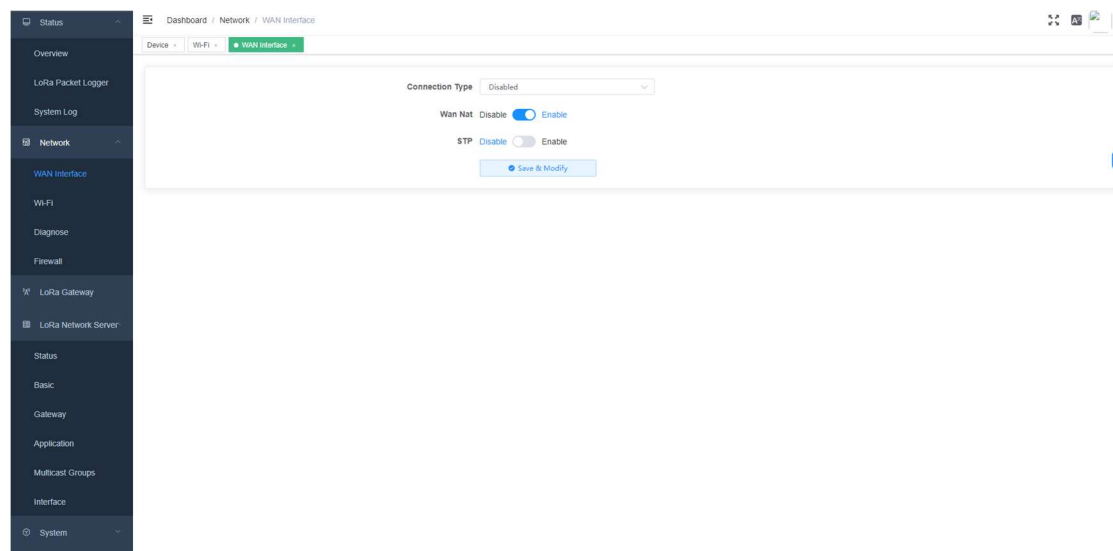
➤ Connect method 2, connect computer by wifi.

Search wifi network, and connect to “Four-Faith”

➤ The default access gateway IP is 192.168.1.1, the default username and password are admin and admin



➤ Under commissioning stage, disable the wan interface, so as not to cause the gateway to restart regularly due to online maintenance



➤ If user need set the wifi parameter, please click Wi-Fi menu.

Status

Overview

LoRa Packet Logger

System Log

Network

WAN Interface

Wi-Fi

Diagnose

Firewall

LoRa Gateway

LoRa Network Server

Status

Basic

Gateway

Application

Multicast Groups

Interface

System

Dashboard / Network / Wi-Fi

Device - Wi-Fi - WAN Interface -

Basic Wireless Security

Wireless Network

Disable ☒ Enable

Wireless Mode

AP

Wireless Network Mode

Mixed

Wireless Network Name (SSID)

Four-faith

Wireless Channel

Auto

Channel Width

Auto

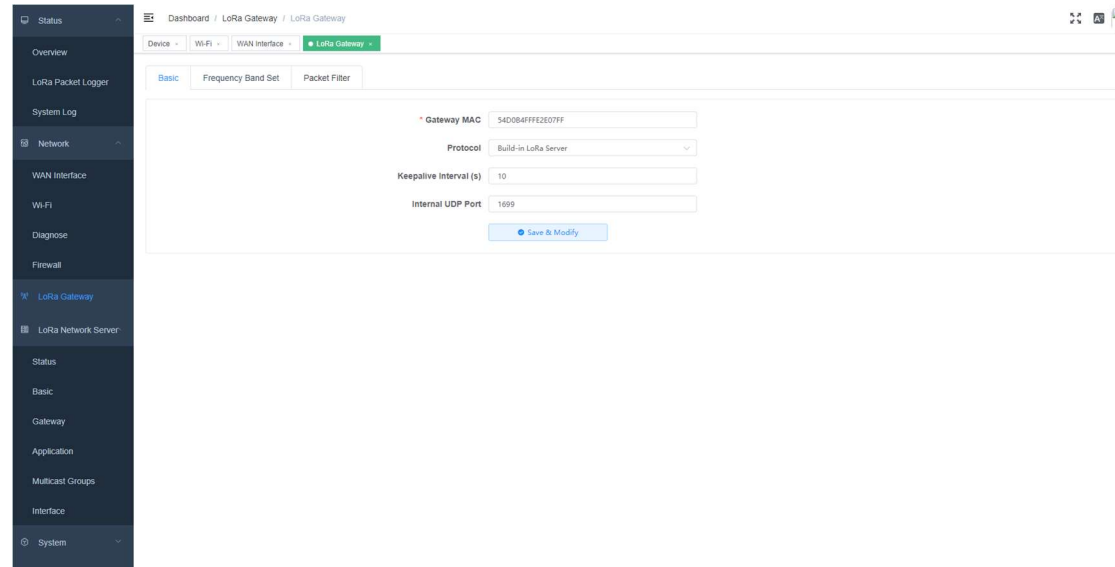
Wireless SSID Broadcast

Disable ☒ Enable

Save & Modify

LoRa Gateway

- If user don't have a NS, please select Build-in LoRa Server.



Dashboard / LoRa Gateway / LoRa Gateway

Device -> Wi-Fi -> WAN Interface -> **LoRa Gateway**

Basic Frequency Band Set Packet Filter

Gateway MAC: 54D0B4FFE2E07FF

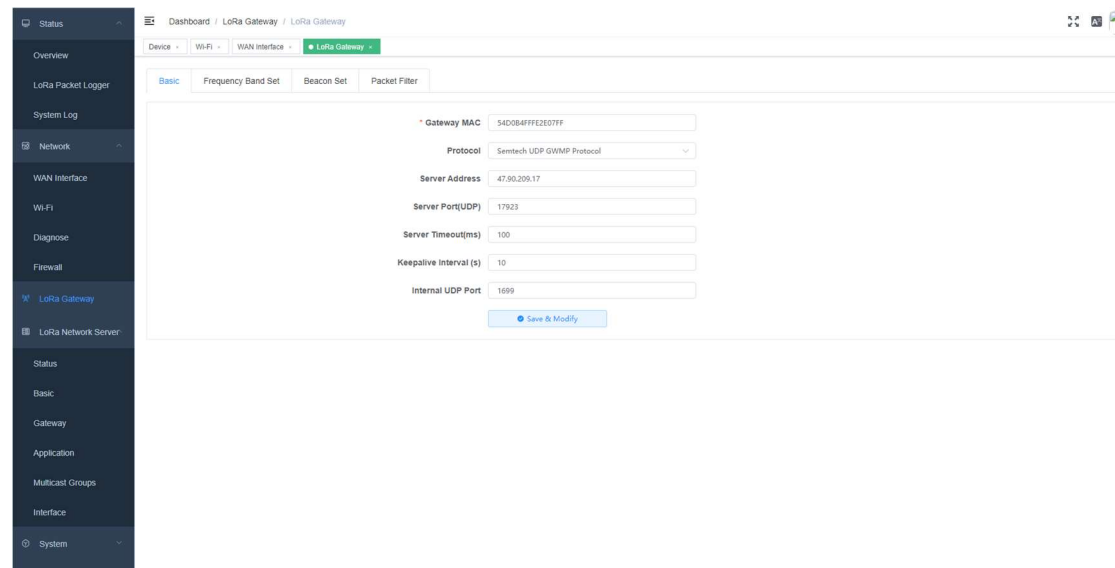
Protocol: Build-in LoRa Server

Keepalive Interval (s): 10

Internal UDP Port: 1699

Save & Modify

- If user has a LoRa server, please fill in the server IP address and Port.



Dashboard / LoRa Gateway / LoRa Gateway

Device -> Wi-Fi -> WAN Interface -> **LoRa Gateway**

Basic Frequency Band Set Beacon Set Packet Filter

Gateway MAC: 54D0B4FFE2E07FF

Protocol: Semtech UDP GWMP Protocol

Server Address: 47.90.209.17

Server Port(UDP): 17923

Server Timeout(ms): 100

Keepalive Interval (s): 10

Internal UDP Port: 1699

Save & Modify

- Set frequency band and custom frequency based on the application

Status

Overview

LoRa Packet Logger

System Log

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LoRa Gateway

LoRa Network Server

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Gateway

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Interface

System

Dashboard / LoRa Gateway / LoRa Gateway

Device

Wi-Fi

WAN Interface

LoRa Gateway

Basic

Frequency Band Set

Beacon Set

Packet Filter

Working Area (Frequency Band MHz)

US915

Is Customize

preset group

custom frequency

Conform to LoRaWAN

The page switching data will not be synchronized, and it will take effect after clicking Save & Modify on the corresponding page.

LoRaWAN Public

Multi-SF LoRa Channel (MHz)

902.3

902.5

902.7

902.9

903.1

903.3

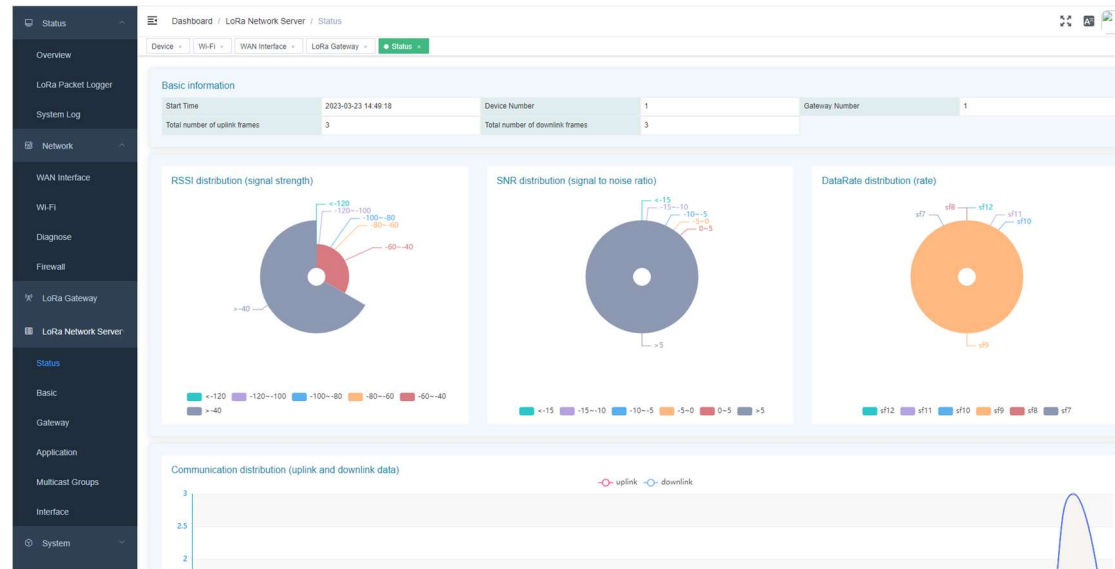
903.5

903.7

Save & Modify

LoRa Network Server

➤ Terminal status and uplink/downlink data

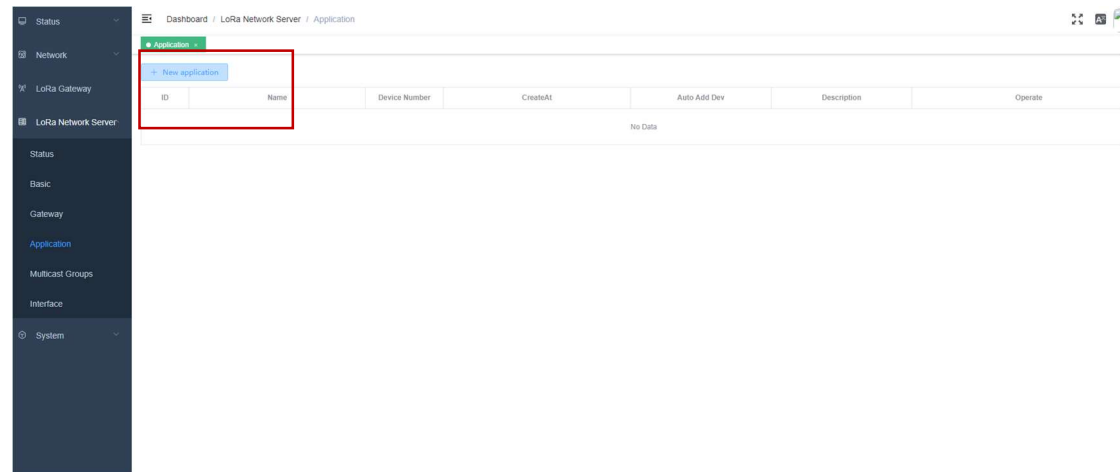


➤ Lora Rx Information

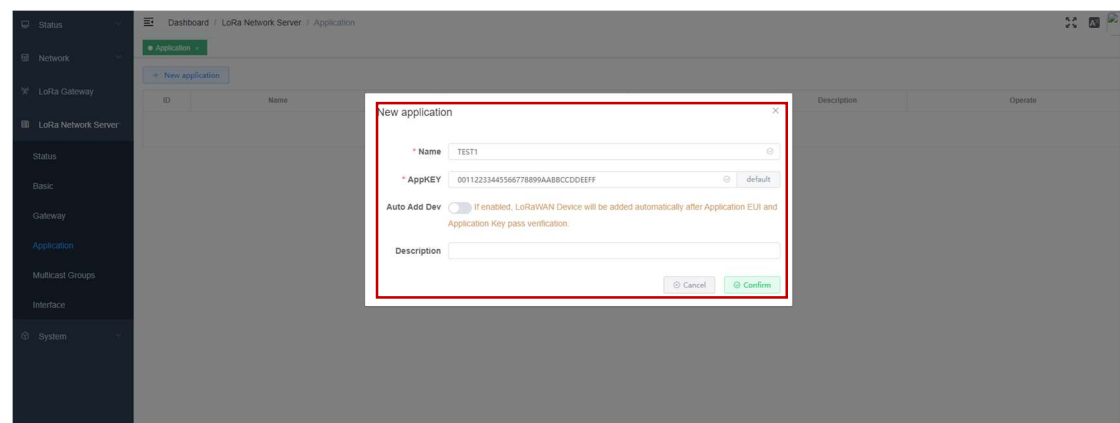
The screenshot displays the 'Basic' configuration page of the LoRa Network Server. The left sidebar is the same as the previous screenshot. The main content area shows the 'Basic' tab for a specific device. It includes a 'Working Area (Frequency Band MHz)' dropdown set to 'US915'. Below this is an 'ADR' toggle switch. The 'Network ID' field is set to '000000' with a note: 'Network identifier (NetID, 3 bytes) encoded as HEX (e.g. 010203)'. The 'Rx 2 Frequency (Hz)' field is set to '923300000'. The 'Rx 2 Datarate' dropdown is set to 'LoRaSF12/500kHz'. A 'Save & Modify' button is at the bottom.

ADD Device

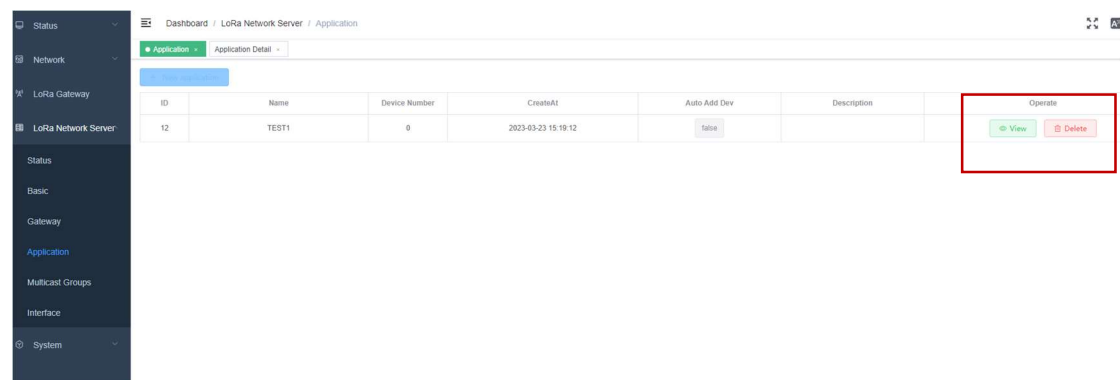
- Step1 Click application menu then click New application

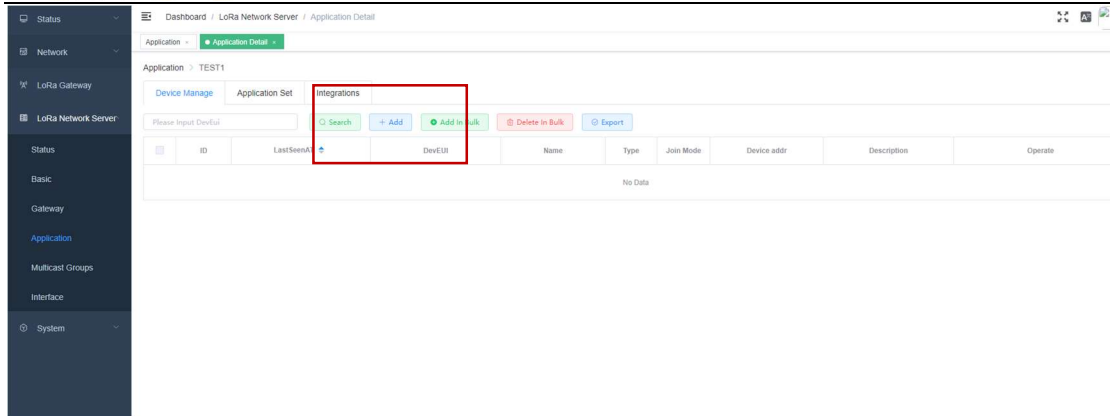


- Input Name and AppKEY, then click Confirm.

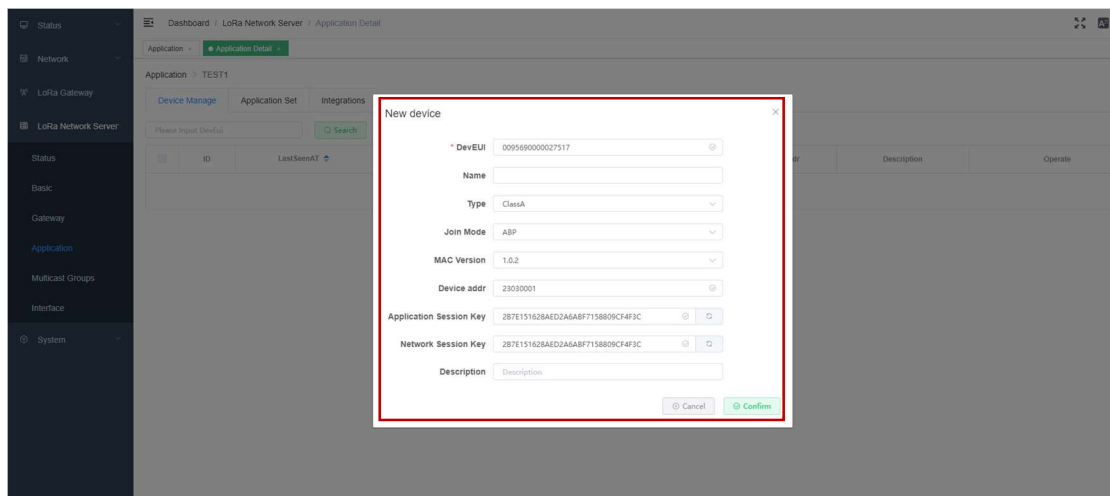


- Step2 Click View then click Add to add device

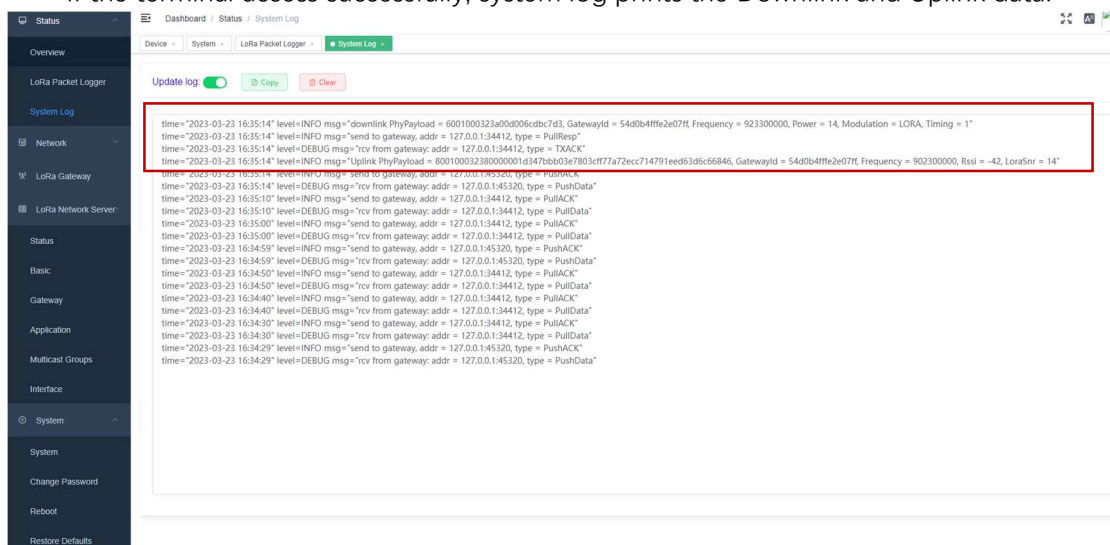




- Input DevEUI, select ClassA, Join Mode ABP, and input Appskey, Nwkskey, Dev address, click Confirm



- Step3 Reset pressure transmitter and trigger access network process.
Put the magnet close to the screen and keep it for 3s, shut down the pressure transmitter, then bring the magnet close to the screen to activate the pressure transmitter.
If the terminal access successfully, system log prints the Downlink and Uplink data.



- Step4 Click View to check the device status.

Dashboard / LoRa Network Server / Application Detail

Application: TEST1

Device Manage Application Set Integrations

Please Input DeviceID

ID	LastSeenAt	DevEUI	Name	Type	Join Mode	Device addr	Description	Operate
9	never	009569000027517	dev_00027517	A	ABP	23030001		View Delete

Total 1 10/page 1 Go to 1

- Step5 Click debug and send setting data.
- Modify the Fport and data type according to the device info.

Dashboard / LoRa Network Server / Device

Application: TEST1 / 009569000027517 (dev_00027517)

Overview Configure Activation Debug

Timed sending: ☐ 10 Second

FPort: 10

Confirm type: ☒ UnConfirmed ☐ Confirmed

Data type: ☒ ASCII ☐ HEX

Data: 0102030405

Update log: ☒

Data type	Receiving time	GatewayID	RSSI	SNR	Data
No Data					

Dashboard / LoRa Network Server / Device

Application: test1 / 009569000027517 (test)

Overview Configure Activation Debug

Timed sending: ☐ 10 Second

FPort: 1

Confirm type: ☒ UnConfirmed ☐ Confirmed

Data type: ☐ ASCII ☒ HEX

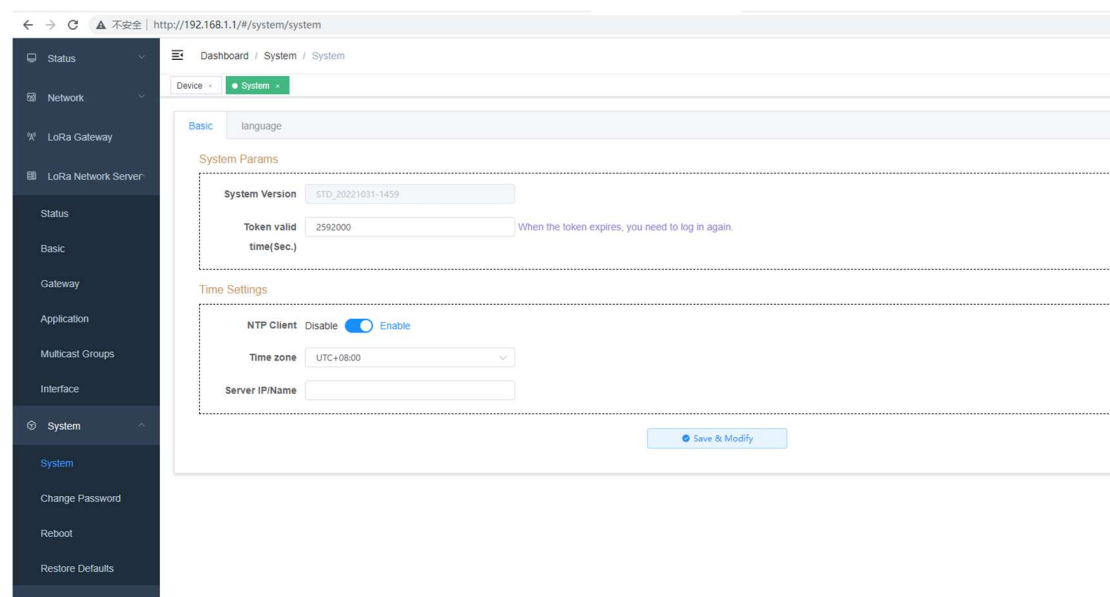
Data: a5 5a ef 24 01 5f 68 f1 02 04 00 00 00 02 04 00 00 00 6d 8c 55 aa

Update log: ☒

Data type	Receiving time	GatewayID	RSSI	SNR	Data
Uplink	2023-03-23 15:25:01	5400b4ff2e607ff	-41	13.8	a5 5a ef 12 01 5f 68 f1 02 04 00 00 03 a5 07 e4 55 a a
Uplink	2023-03-23 15:24:54	5400b4ff2e607ff	-40	11	a5 5a 10 12 01 5f 68 f1 34 a5 00 00 00 00 a8 4a 55 aa
Downlink	2023-03-23 15:24:45		0	0	a5 5a ef 24 01 5f 68 f1 02 04 00 00 00 02 04 00 0 0 00 00 6d 8c 55 aa
Uplink	2023-03-23 15:23:21	5400b4ff2e607ff	-40	14	a5 5a ef 18 01 5f 68 f1 02 04 00 00 03 e8 03 04 00 0 0 00 00 a8 74 55 aa
Uplink	2023-03-23 15:23:15	5400b4ff2e607ff	-42	13.8	a5 5a 10 12 01 5f 68 f1 34 a5 00 01 00 00 69 c7 55 aa
Downlink	2023-03-23 15:23:04		0	0	a5 5a ef 24 01 5f 68 f1 03 04 00 00 00 02 04 00 0 0 00 00 a8 71 55 aa
Uplink	2023-03-23 15:22:42	5400b4ff2e607ff	-42	11.8	a5 5a 10 12 01 5f 68 f1 34 00 00 01 00 00 ba 16 55 aa
Uplink	2023-03-23 15:22:01	5400b4ff2e607ff	-43	12.3	a5 5a 10 12 01 5f 68 f1 34 a5 00 01 00 00 68 5f 55 a a
Uplink	2023-03-23 15:22:00	5400b4ff2e607ff	-43	16.3	a5 5a 10 12 01 5f 68 f1 34 a5 00 01 00 00 68 5f 55 a a
Downlink	2023-03-23 15:21:48	5400b4ff2e607ff	-41	14.3	a5 5a 10 12 01 5f 68 f1 34 a5 00 01 00 00 68 5f 55 a a

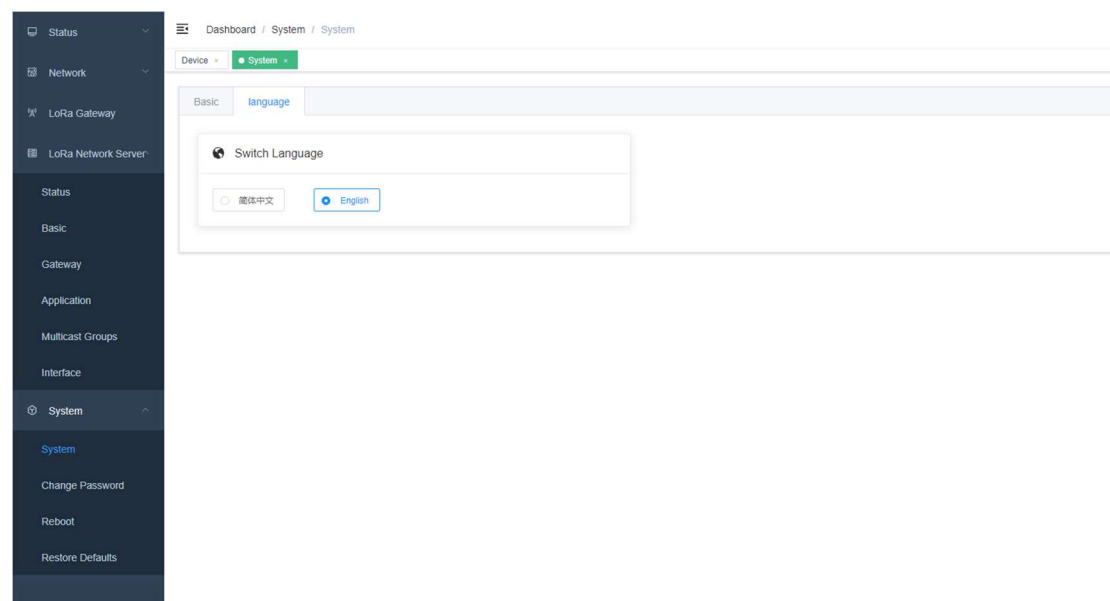
Gateway System Set

➤ NTP Server



The screenshot shows the 'System' configuration page for the 'System' device. The left sidebar contains a menu with 'System' selected. The main content area has a 'Basic' tab and a 'language' sub-tab. Under 'System Params', there are fields for 'System Version' (STD_20221031-1459), 'Token valid time(Sec.)' (2592000), and a note 'When the token expires, you need to log in again.' Under 'Time Settings', there is a toggle for 'NTP Client' (set to 'Enable'), a 'Time zone' dropdown (set to 'UTC+08:00'), and a 'Server IP/Name' field. A 'Save & Modify' button is at the bottom right.

➤ Language Set



The screenshot shows the 'Language Set' configuration page in the 'System' configuration section. A 'Switch Language' dialog box is open, showing two options: '简体中文' (Simplified Chinese) and 'English'. The 'English' option is selected with a radio button. The background shows the same 'System' configuration page as the previous screenshot, but the 'language' sub-tab is active.

Gateway Time Manual Set

Open a new tab, input 192.168.1.1:8088

Click 设定, then click 应用

⚠ 不安全 | 192.168.1.1:8088

Wireless Mobile Router

2G/3G/4G/5G

固件: F8L10GW-10TGW-32M v2.0 (Nov 9 2022 16:30:04) std
时间: 16:17:44 up 1:16, load average: 0.67, 0.66, 0.57
WAN: 已禁用

本地IP地址: 192.168.1.1
子网掩码: 255.255.255.0
网关: 0.0.0.0
本地DNS: 0.0.0.0

WAN端口
指定WAN口为交换口 (WAN口交换 ☒)

网络地址服务器设置 (DHCP)

DHCP 类型: DHCP 服务器
DHCP 服务器: ☒ 启用 ☐ 禁用
起始IP地址: 192.168.1.100
最大DHCP用户数: 50
客户租约时间: 1440 分钟
静态DNS 1: 0.0.0.0
静态DNS 2: 0.0.0.0
静态DNS 3: 0.0.0.0
WINS: 0.0.0.0
为DHCP使用DNsmasq: ☒
为DNS使用DNsmasq: ☒
以DHCP为准: ☒

时间设置

NTP客户端: ☒ 启用 ☐ 禁用
时区: UTC+08:00
夏令时 (DST): 无
服务器IP/主机名:

时间调整

自动 2023 03 23 16 17 46 **设定**

您期望的起始地址。

最大DHCP用户数:
您可以限制您的路由器分配出的地址个数。0表示只分配预先设定的静态地址。

时间设置:
请选择您所在的时区和夏令时 (DST) 期间。本路由器可以使用本地时间或者UTC时间。

保存设置 应用 取消