



UC11-N1

Quick Start Guide



Welcome

Thank you for choosing Ursalink UC11-N1.

This guide will teach you how to install the UC11-N1 and how to connect to Ursalink Cloud. Once you complete the installation, refer to the Ursalink UC11-N1 User Guide on how to perform configurations on the device.

Related Documents

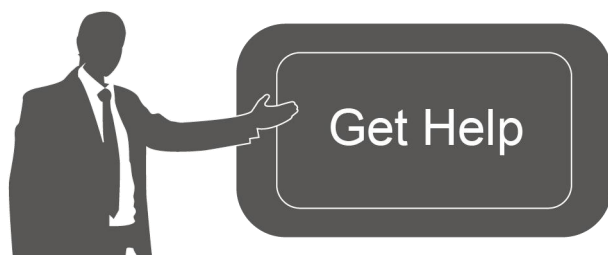
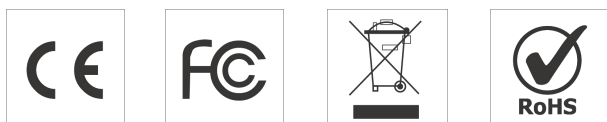
This Start Guide only explains the installation of Ursalink UC11-N1. For more functionality and advanced settings, please refer to the relevant documents as below.

Document	Description
Ursalink UC11-N1 Datasheet	Datasheet for the Ursalink UC11-N1.
Ursalink UC11-N1 User Guide	Users can refer to the guide on how to configure all the settings.

The related documents are available on Ursalink website: <http://www.ursalink.com>.

Declaration of Conformity

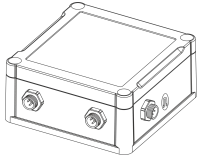
Ursalink UC11-N1 is in conformity with the essential requirements and other relevant provisions of the CE, FCC, and RoHS.



For assistance, please contact
Ursalink technical support:
Email: support@ursalink.com
Tel: 86-592-5023060
Fax: 86-592-5023065

1. Packing List

Before you begin to install the UC11-N1, please check the package contents to verify that you have received the items below.



1 × UC11-N1 Device



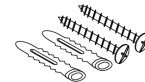
2 × Data Cable



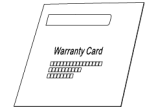
1 × USB Cable



1 × Magnet



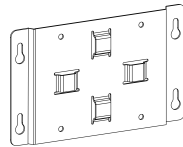
Setscrews



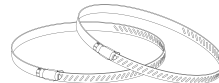
1 × Warranty Card



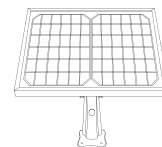
1 × DC Power Cable
(DC version only)



1 × Wall Mounting Kit



2 × Pole Mounting Kit
(Optional)



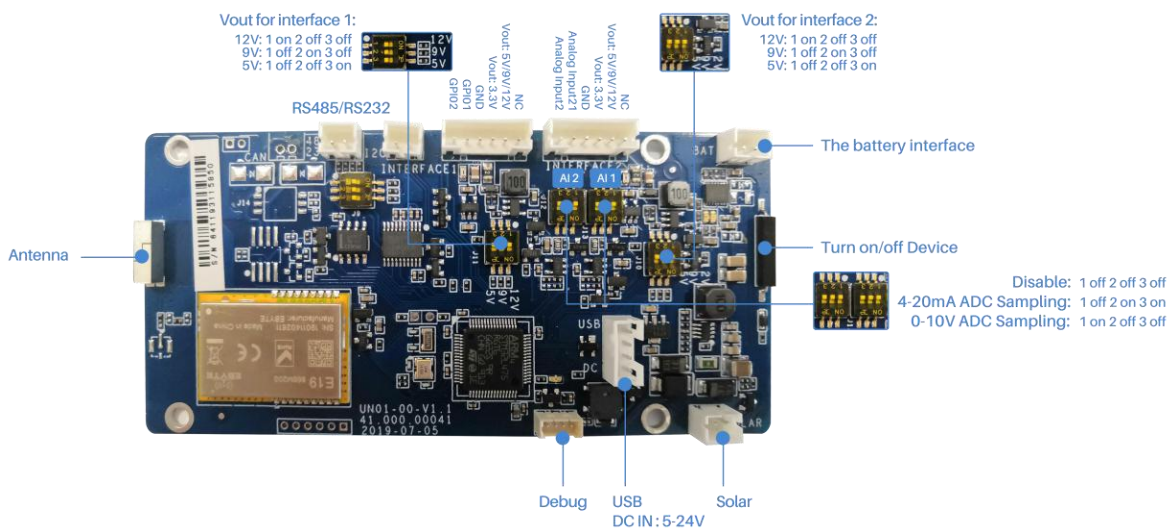
1 × Solar Panel Kit
(Optional)



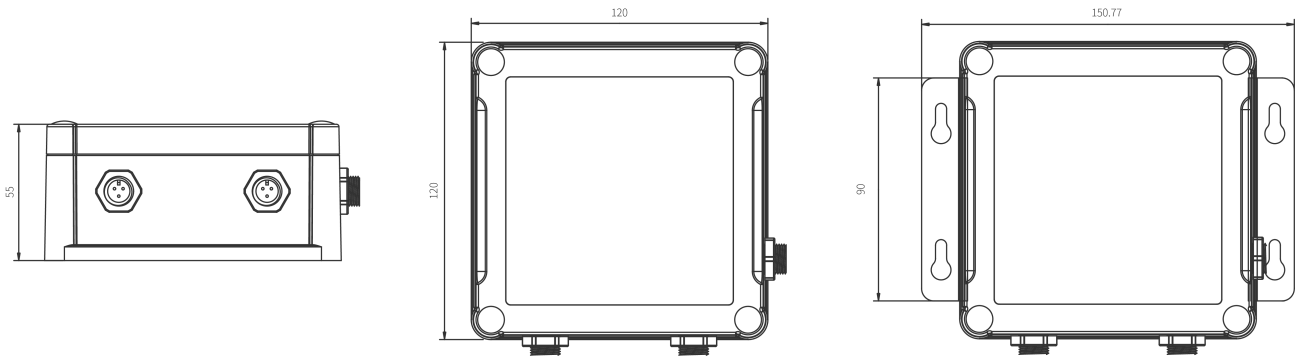
If any of the above items is missing or damaged, please contact your Ursalink sales Representative.

2. Hardware Introduction

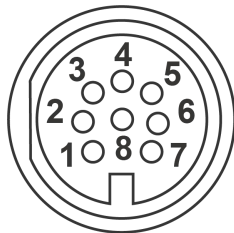
2.1 Terminal Description



2.2 Dimensions(mm)



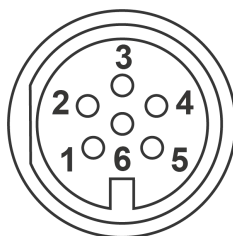
2.3 Pinouts



Interface 1

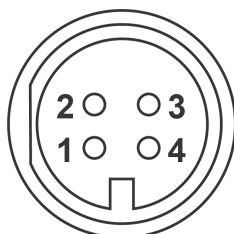
PIN	Definition
1	5V/9V/12V
2	3.3V
3	GND
4	GPIO1
5	GPIO2
6	Switchable
7	Interfaces
8	Reserved

PIN	RS232	RS485
6	TXD	A
7	RXD	B



Interface 2

PIN	Definition
1	5V/9V/12V
2	3.3V
3	GND
4	AIN1
5	AIN2
6	Reserved



USB&Power Connector

PIN	Definition
1	GND
2	USB_D+
3	USB_D-
4	VCC(5-24V)

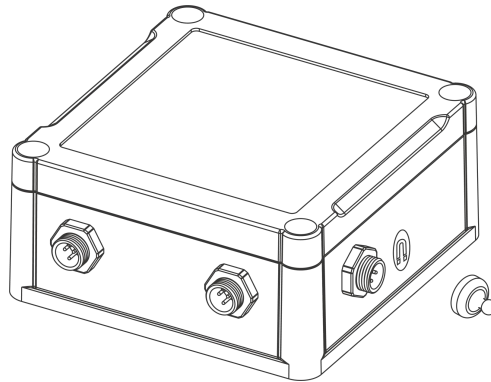
3. Hardware Configuration and Installation

3.1 Turn ON/OFF UC11-N1

Place the magnet on the sign “U” to turn on/off UC11-N1.

Power on: Beep for 2 seconds

Power off: Beep for 6 seconds

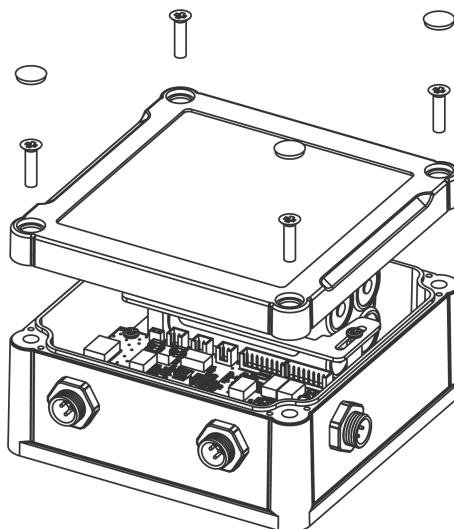


3.2 Hardware Switch

When using the analog input and power output of UC11-N1, you can switch the working mode of hardware interface. Please follow the steps:

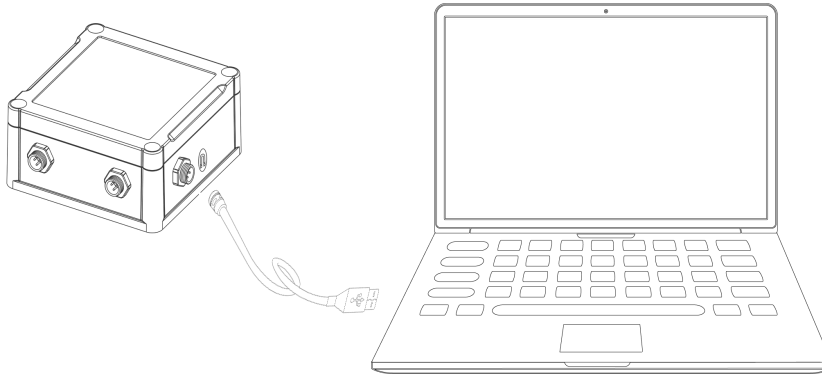
- A. Remove the screw caps and take off the roof cover.
- B. Change DIP switches that are related analog inputs and power outputs as shown in [Section 2.1](#).
- C. Put back the roof cover and screw the screws.

Note: Analog inputs are set to 4-20mA by default, power outputs are set to 12V by default.



3.3 USB Configuration

Connect UC11-N1 to laptop via USB cable.

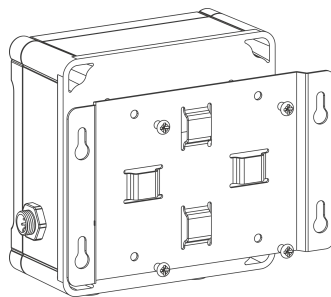


3.4 Mount the UC11-N1

Wall Mounting

Make sure you have wall mounting bracket, bracket mounting screws, wall plugs, wall mounting screws and other required tools.

A. Mount the enclosure to the mounting bracket with the bracket mounting screws.



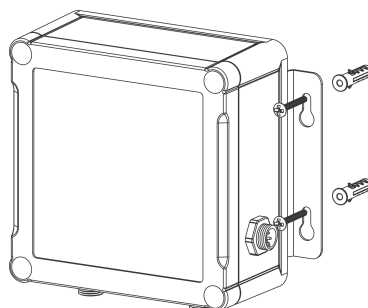
B. Align the mounting bracket horizontally to the desired position on the wall, use a marker pen to mark four mounting holes on the wall, and then remove the mounting bracket from the wall.

Note: The connecting lines of adjacent points are at right angles.

C. Drill the four holes by using your drill with a 6 mm drill bit on the positions you marked previously on the wall.

D. Insert four wall plugs into the holes respectively.

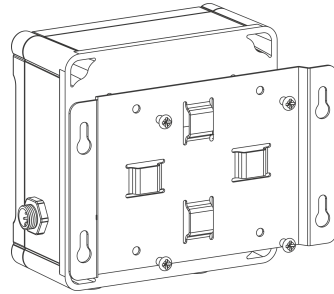
E. Mount the mounting bracket horizontally to the wall by fixing the wall mounting screws into the wall plugs.



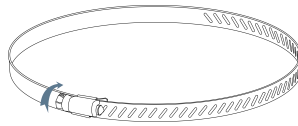
Pole Mounting

Make sure you have wall mounting bracket, bracket mounting screws, hose clamp and other required tools.

A. Mount the enclosure to the mounting bracket with the bracket mounting screws.

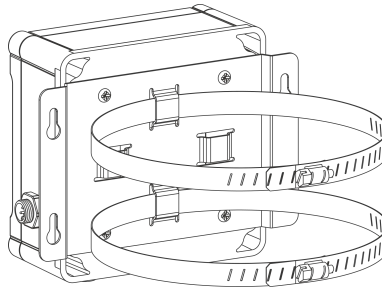


B. Loosen the hose clamp by turning the locking mechanism counter-clockwise.



C. Straighten out the hose clamp and slide it through the rectangular holes in the mounting bracket, wrap the hose clamp around the pole.

D. Use a screwdriver to tighten the locking mechanism by turning it clockwise.



4. Connect N1 to Ursalink Cloud

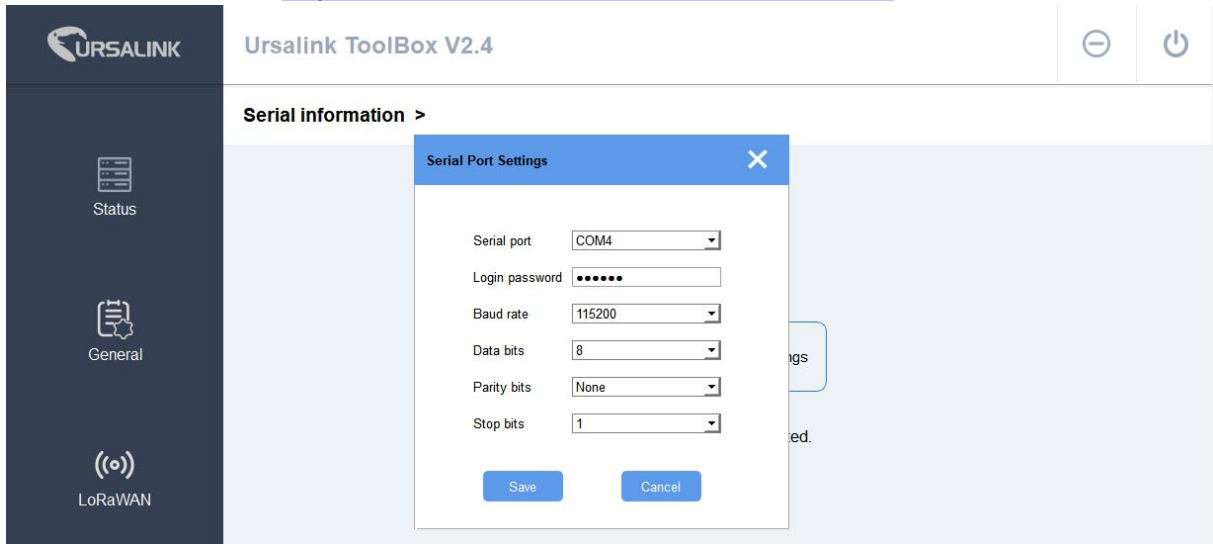
This chapter takes example of how to realize remote monitoring of sensor data among UC11-N1, Ursalink Cloud and sensor with RS485 serial port.

4.1 Configure UC11-N1 via Toolbox

A. Connect PC and UC11-N1 directly via USB port as shown in [Section 3.3](#).

B. Download Toolbox software from Ursalink website and open Toolbox.exe. Select correct Serial Port fill in the password to log in. (Default password: 123456)

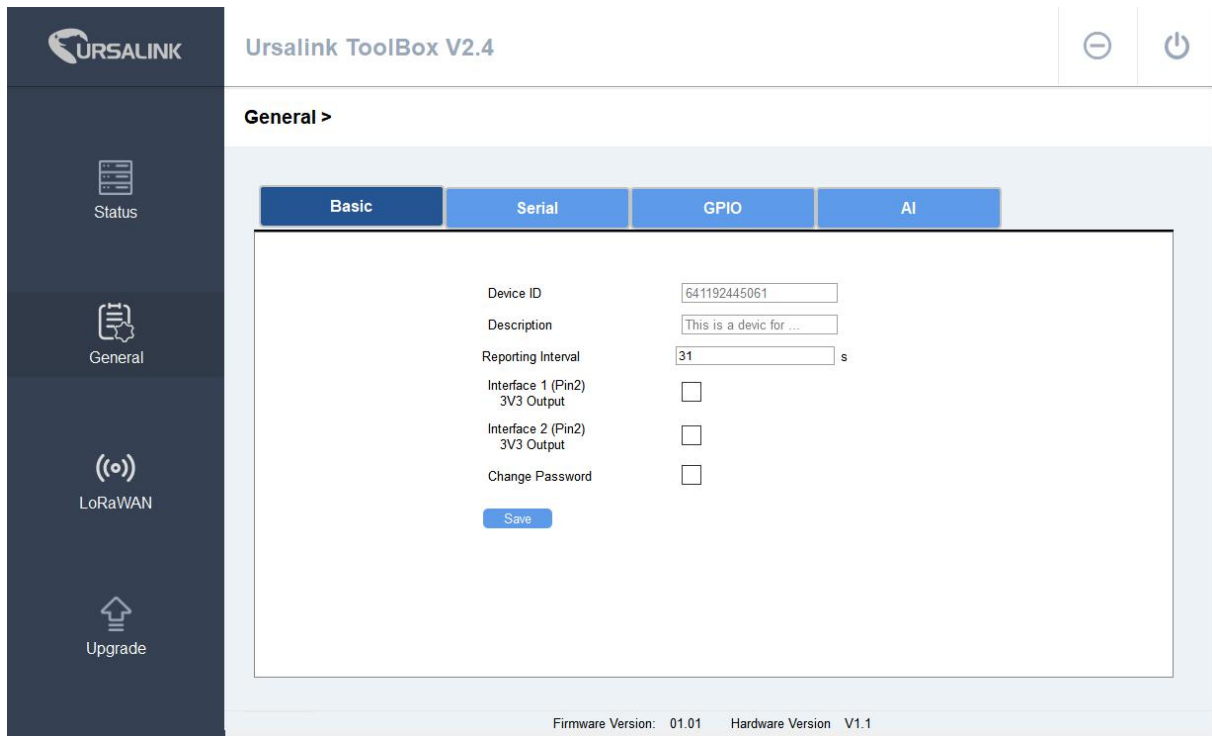
Toolbox Download link: <https://www.ursalink.com/en/software-download/>



C. Click "Status" to check property of UC11-N1.



D. Click "General->Basic" to configure the "Reporting Interval".



E. Click “General->Serial” to configure RS485 property and Modbus channels.

4.2 RS485 Configuration Example

UC11-N1 collects data from two Modbus RTU sensors and provides power to them.

Sensor property:

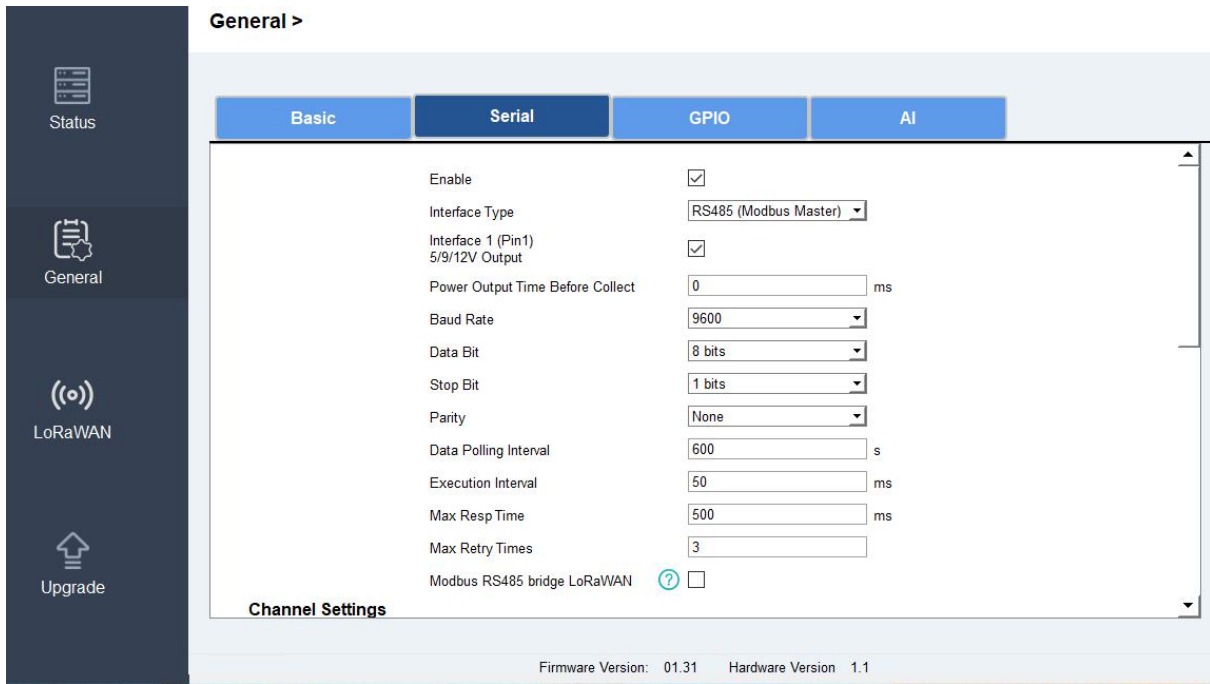
Sensor	Serial Port	Slave ID	Address	Type	Power Supply
Light Sensor	9600 8N1	1	6	Holding Register (INT16)	12VDC
Wind speed sensor	9600 8N1	2	0	Holding Register (INT16)	12VDC

Configuration Steps:

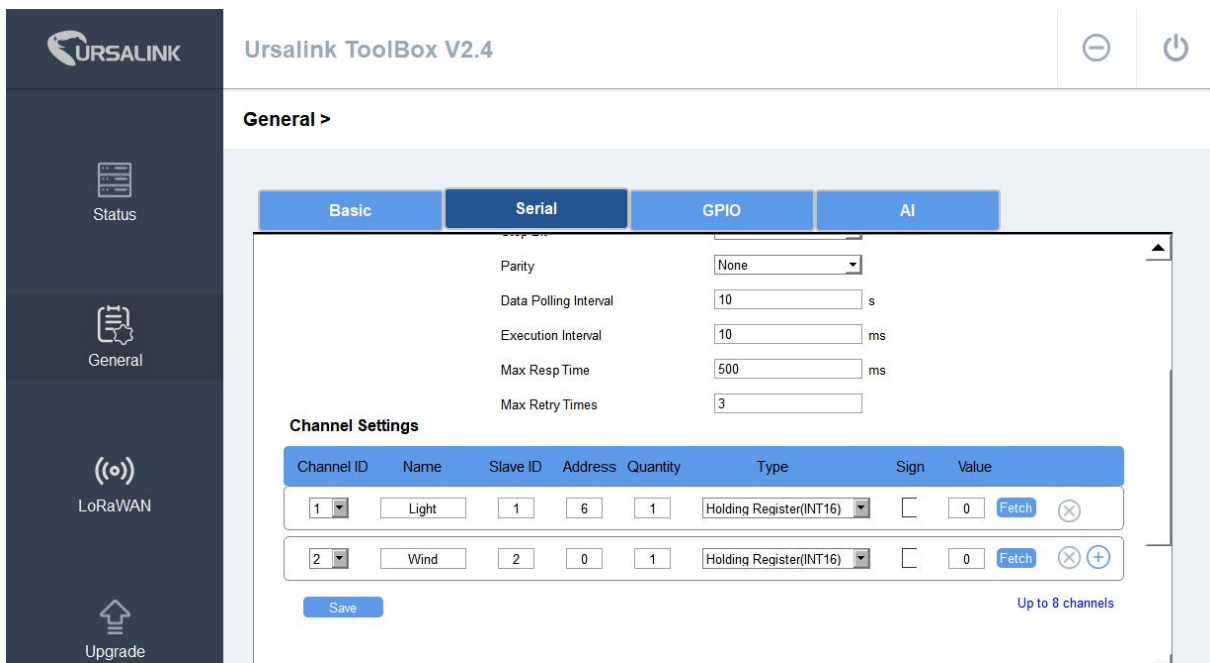
A. Connect RS485 and power output of UC11-N1 to sensors. Wiring method:

UC11-N1	Orange (12V/9V/5V)	Brown (V+)	Sensors
	Black (GND)	Brown (V-)	
	Green (A)	Green (A)	
	Yellow (B)	Blue (B)	

B. Go to “General->Serial” to enable and select interface type as “RS485 (Modbus Master)”. Enable interface 1 power output and configure “Power Output Time Before Collect”.

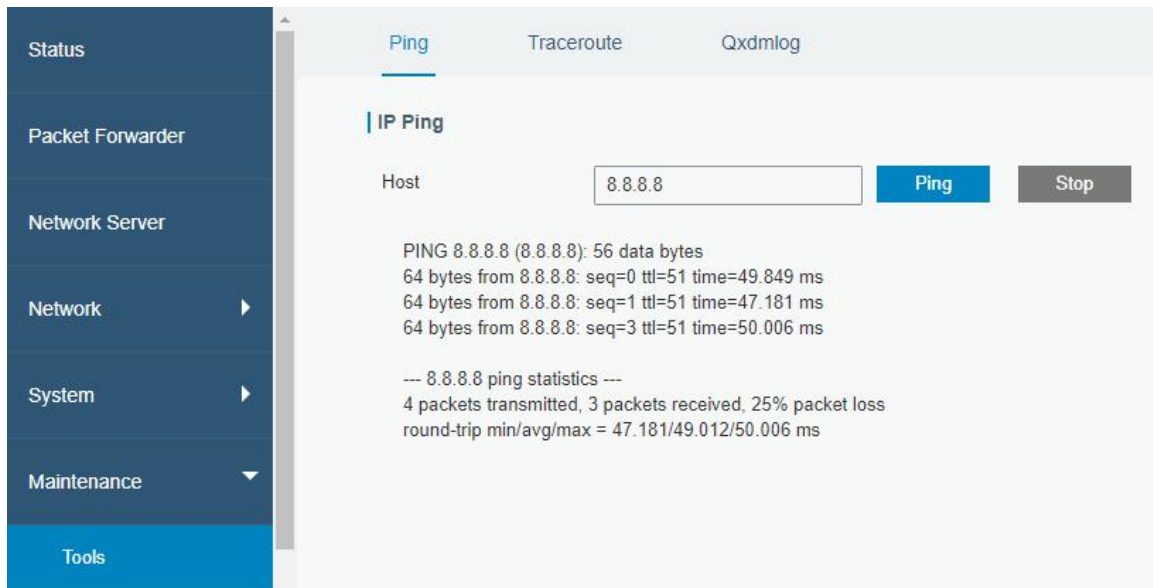


C. Configure Modbus Channels according to information of sensors. After saving configuration, click “Fetch” to check if N1 read correct values.

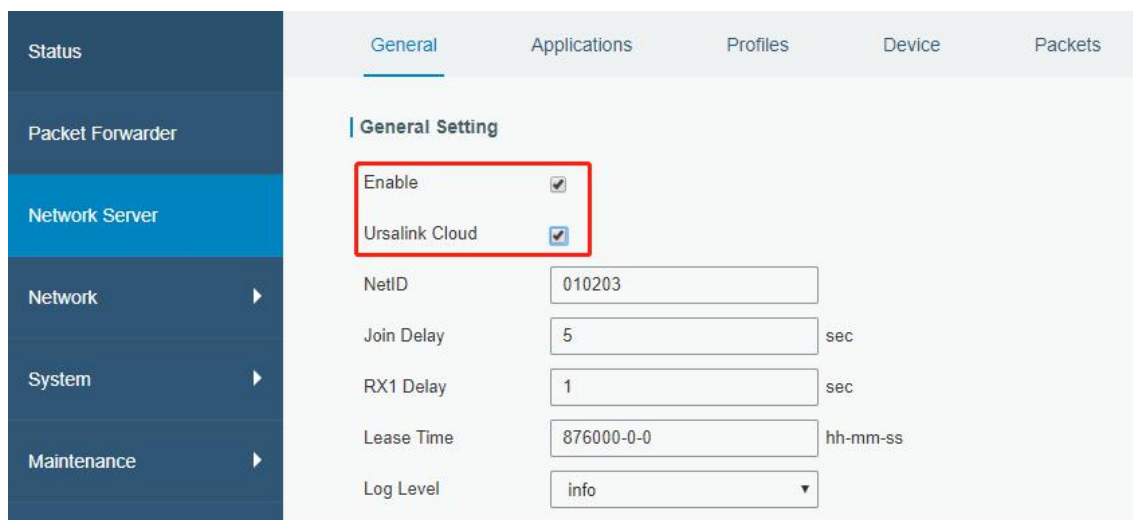
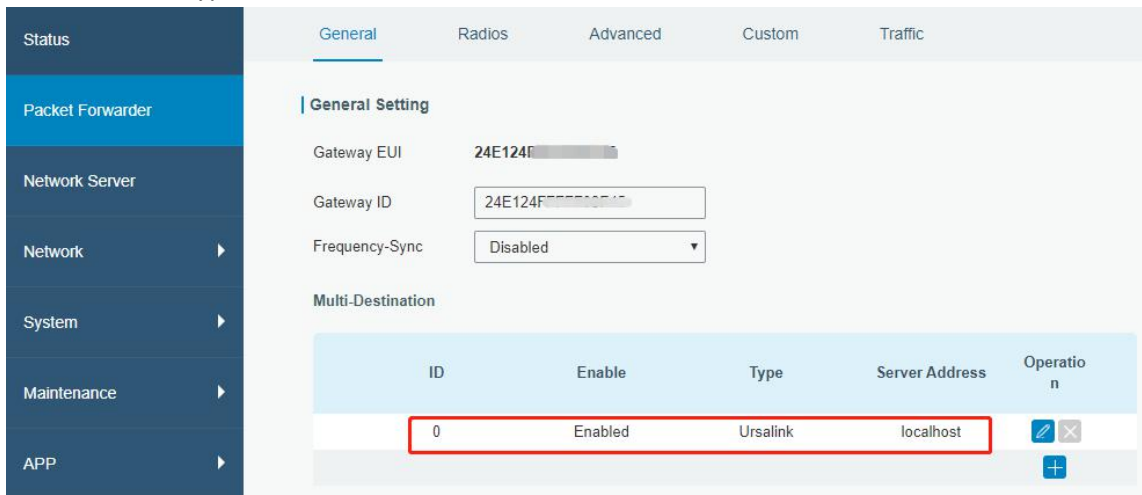


4.3 Ursalink Gateway Configuration

A. Go to “Maintenance->Ping” and use ping tool to check gateway Internet connection.



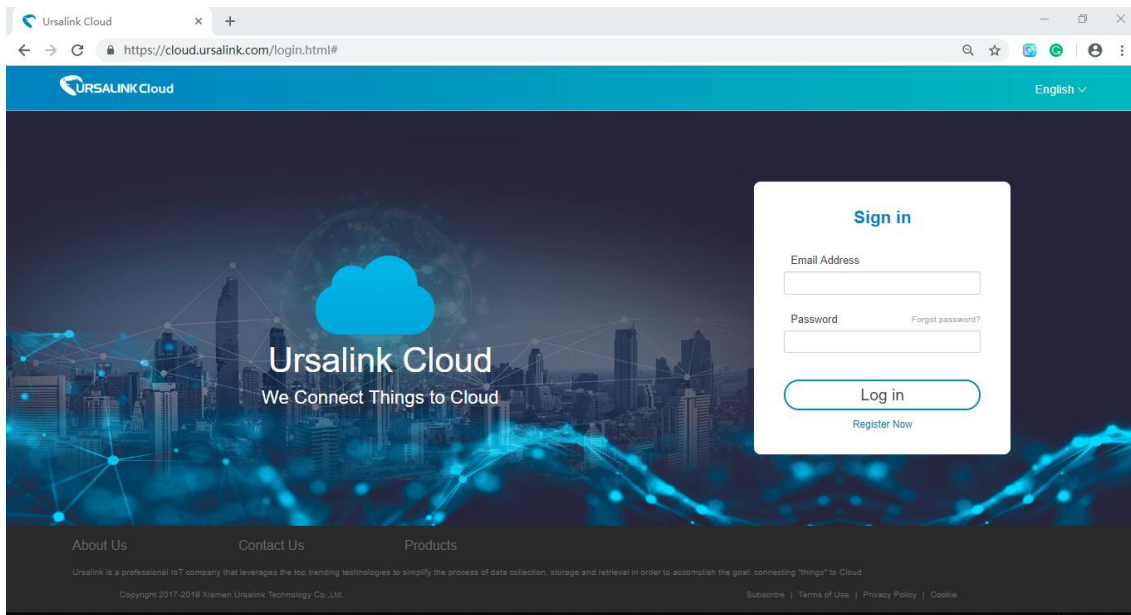
B. Enable “Ursalink” type network server and “Ursalink Cloud” mode.



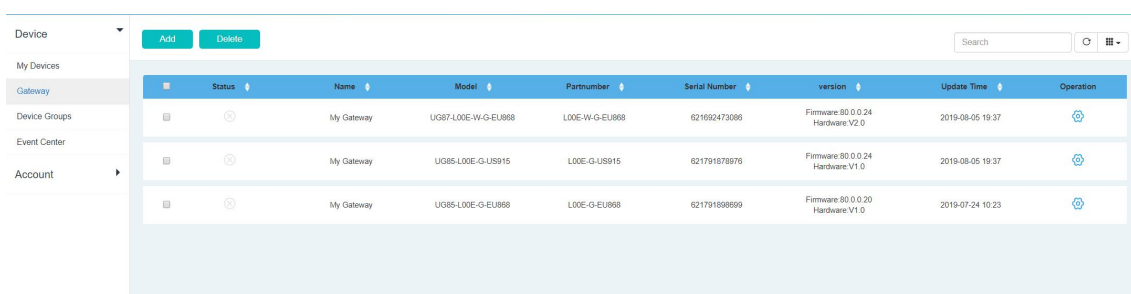
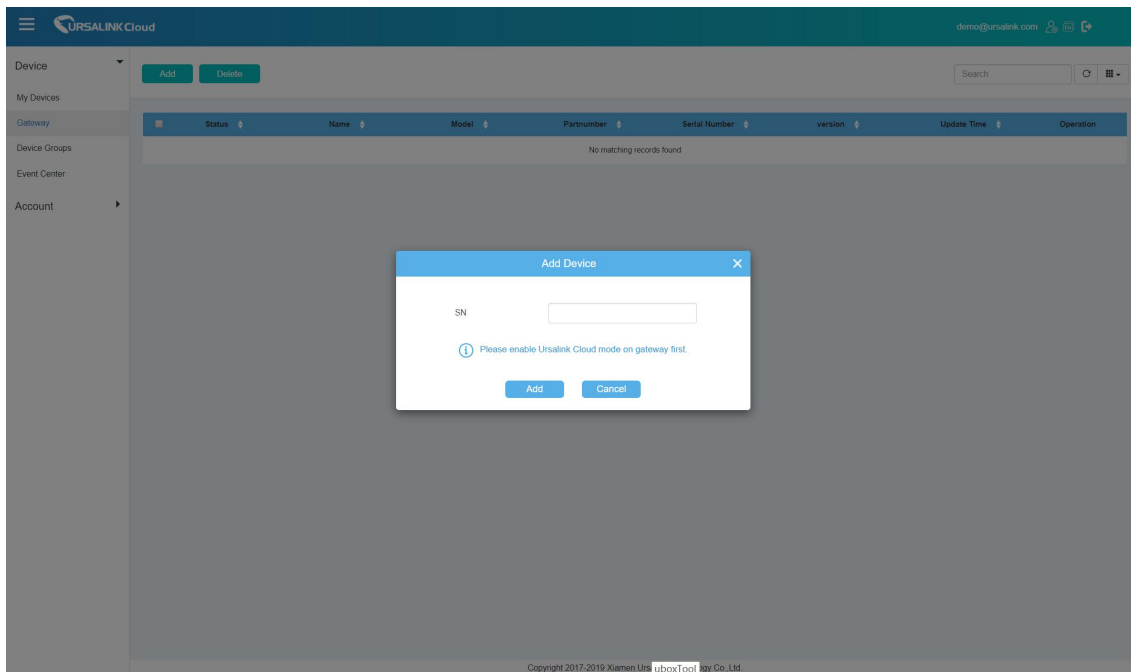
4.4 Ursalink Cloud Configuration

A. Register and log in Ursalink Cloud.

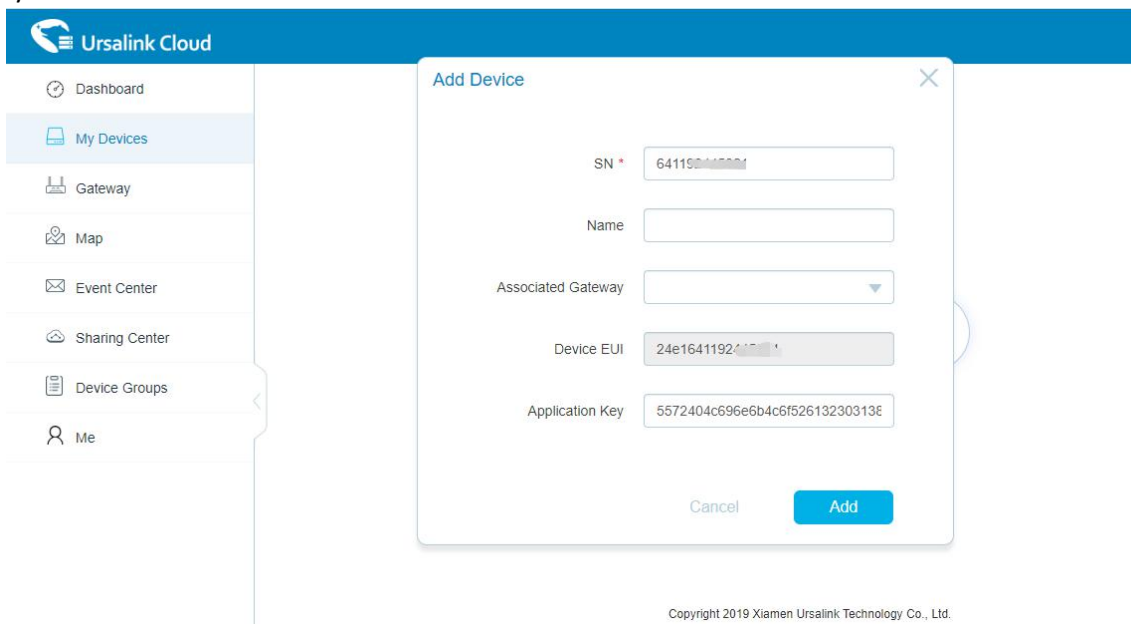
Ursalink Cloud URL: <https://cloud.ursalink.com/login.html>



B. Go to “My Devices->Gateway” and click “Add” to add gateway to Ursalink Cloud via SN.



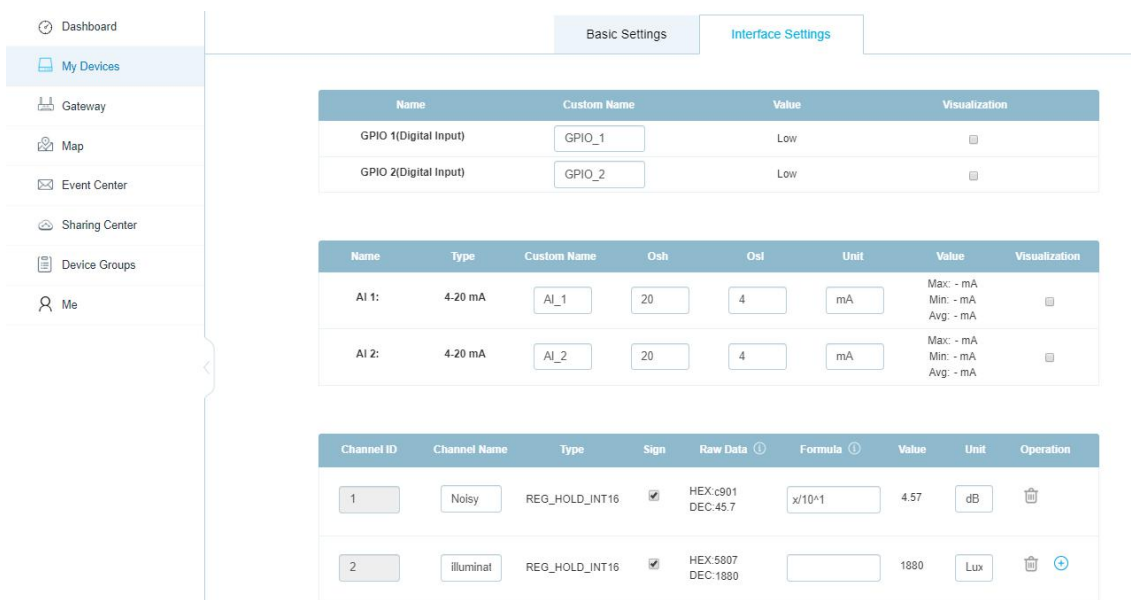
C. Go to “Device->My Devices” and click “Add Device”. Fill in the SN of UC11-N1 and select associated gateway.



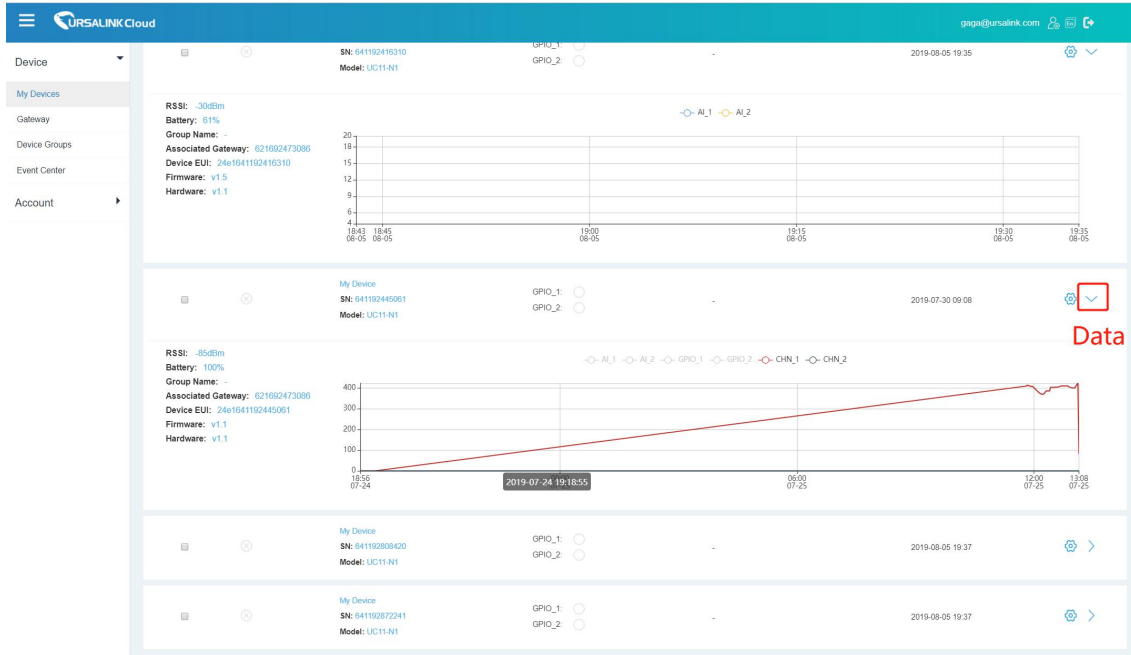
Copyright 2019 Xiamen Ursalink Technology Co., Ltd.

D. Click after UC11-N1 is connected and enter “Interface Settings” to choose and edit relevant data to be shown on dashboard.

Note: Modbus channel settings should be the same as the configuration in Toolbox.



E. Click to check device information and history data.



Note: For more details, please refer to the UC11-N1 user guide.

[END]