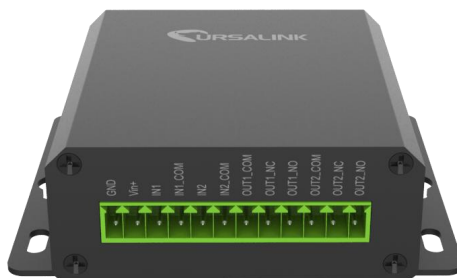# URSALINK

UC11 Series

LoRa Remote I/O

Quick Start Guide

Welcome

Thank you for choosing Ursalink UC11 series remote LoRa I/O.

This guide describes how to install the UC11 series remote LoRa I/O and how to connect to Ursalink LoRaWAN gateway. Once you complete the installation, refer to the Ursalink UC11 User Manual for instructions on how to perform configurations on the device.

Related Documents

This Start Guide only explains the installation of Ursalink UC11 series remote LoRa I/O. For more functionality and advanced settings, please refer to the relevant documents as below.

Document	Description
Ursalink UC11 Datasheet	Datasheet for the Ursalink UC11 series remote LoRa I/O.
Ursalink UC11 User Guide	Users could refer to the guide for instruction on how to configure all the settings.

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

Declaration of Conformity

Ursalink UC11 series remote LoRa I/O is in conformity with the essential requirements and other relevant provisions of the CE, FCC, and RoHS.
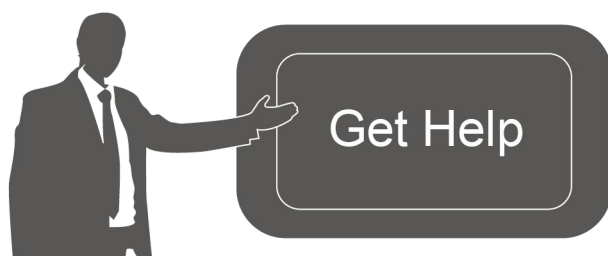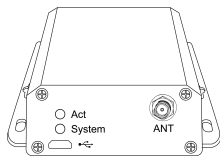

For assistance, please contact
Ursalink technical support:
Email: support@ursalink.com
Tel: 86-592-5023060
Fax: 86-592-5023065

1. Packing List

Before you begin to install the UC11 series remote LoRa I/O, please check the package contents to verify that you have received the items below.
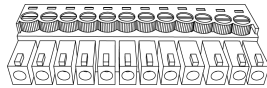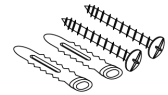
1.1 Package Contents

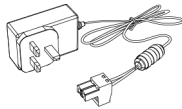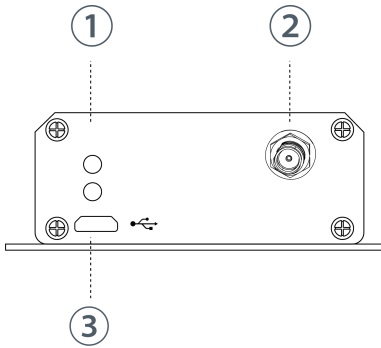|				
1 × UC11	1 × Stubby LoRa Antenna	1 × 12-Pin Pluggable Terminal	1 × Warranty Card	Setscrews

Optional Accessories

1 × Power Adapter
(Optional)

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

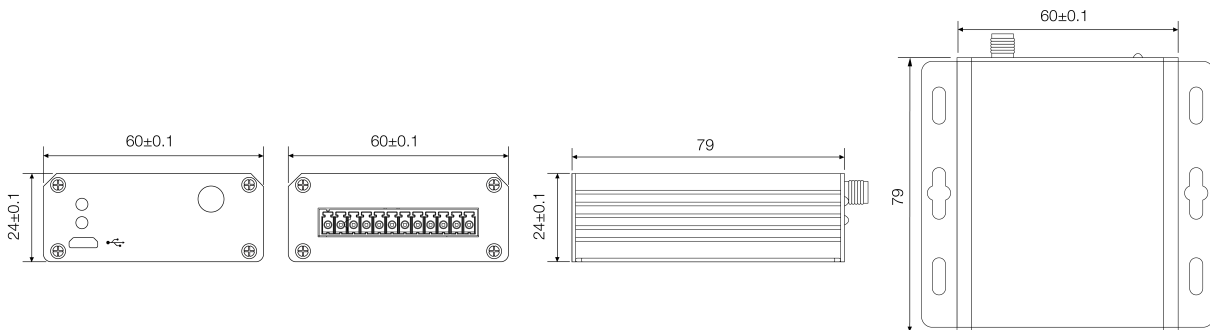## 2. Hardware Introduction

2.1 Overview

A. Front Panel

① LED Indicator Area
    System: System Indicator
    ACT: Network Indicator
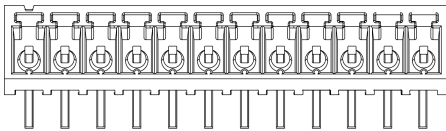② LoRa   Antenna Connector
③ Micro USB Interface

B. Rear Panel
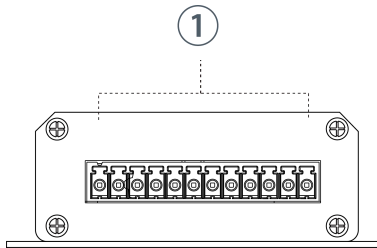
① 12-Pin Pluggable Terminal

2.2 Dimensions (mm)

2.3 Pinouts

PIN	Models		
	UC1114	UC1122	UC1152
1	GND	GND	GND
2	VIN	VIN	VIN
3	IN1	NC	RXD
4	IN1_COM	AIN1+	TXD
5	IN2	AIN1-	GND
6	IN2_COM	AIN2+	A
7	OUT1_COM	AIN2-	B
8	OUT1_NC	IN	IN
9	OUT1_NO	IN_COM	IN_COM
10	OUT2_COM	OUT_COM	OUT_COM
11	OUT2_NC	OUT_NC	OUT_NC
12	OUT2_NO	OUT_NO	OUT_NO

2.4 LED Indicators

LED	Indication	Status	Description
System	System Status	Solid On	System booting
		On for 500ms, off for 500ms	Working properly
		On for 100ms, off for 100ms	Failed to send data
ACT	Network Status	Off	Failed to join network
		On for 75ms, off for 3000ms	Join the network successfully
		On for 500ms, off for 500ms	Sending/Receiveing data

3. Hardware Installation

Environmental Requirements

- Power Input: 5-24 VDC
- Operating Temperature: -40°C to 70°C (-40°F -158°F)
- Relative Humidity: 0% to 95% (non-condensing) at 25°C/77°F

3.1 Antenna Installation

Rotate the antenna into the antenna connector accordingly.
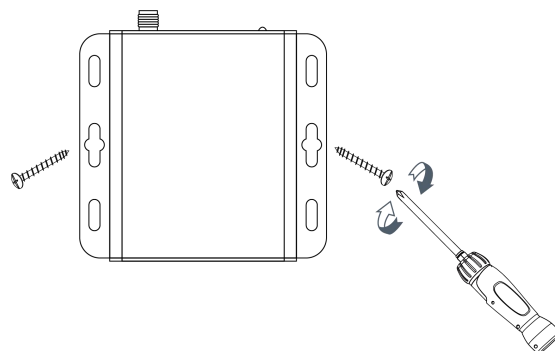The external LoRa antenna should be installed vertically always on a site with a good signal.
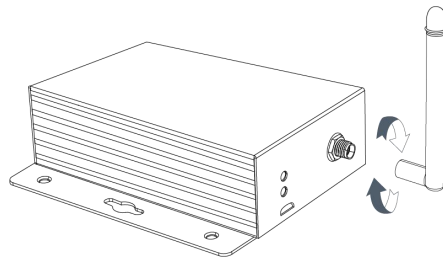
3.2 Connect the UC11 to a Computer
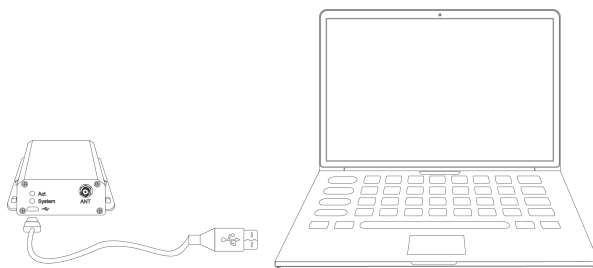
3.4 Mount the UC11

Use 2 pcs of flat head Phillips screws to fix the UC11 onto the wall mounting.

Getting Started

4. Connect to Ursalink LoRaWAN Gateway

4.1 Configure UC11 via Toolbox

Power on the UC11, connect PC USB port to micro USB port of UC11 series remote LoRa I/O directly, PC Setup the Toolbox.

① Select Serial port and input the login password, default "123456", then click "Save"
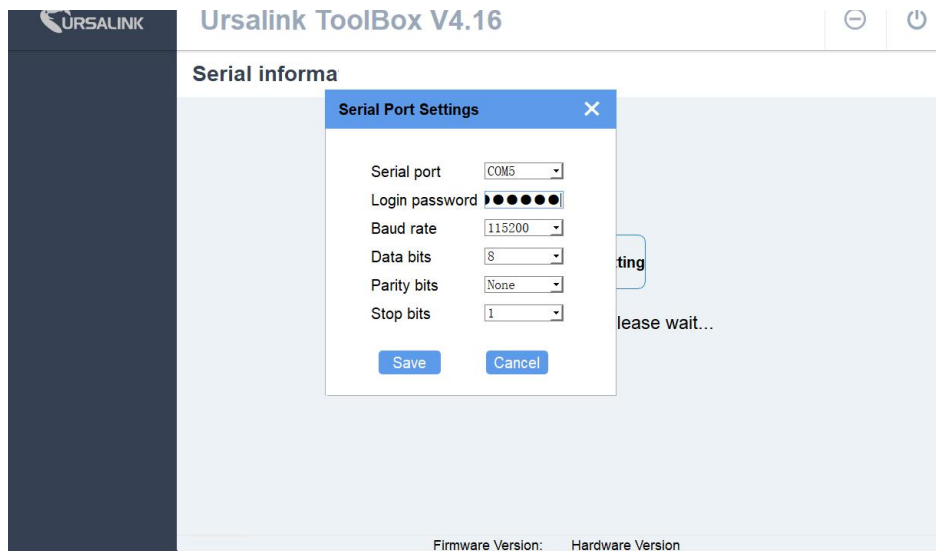
② Click "Status" to check status of the Remote I/O
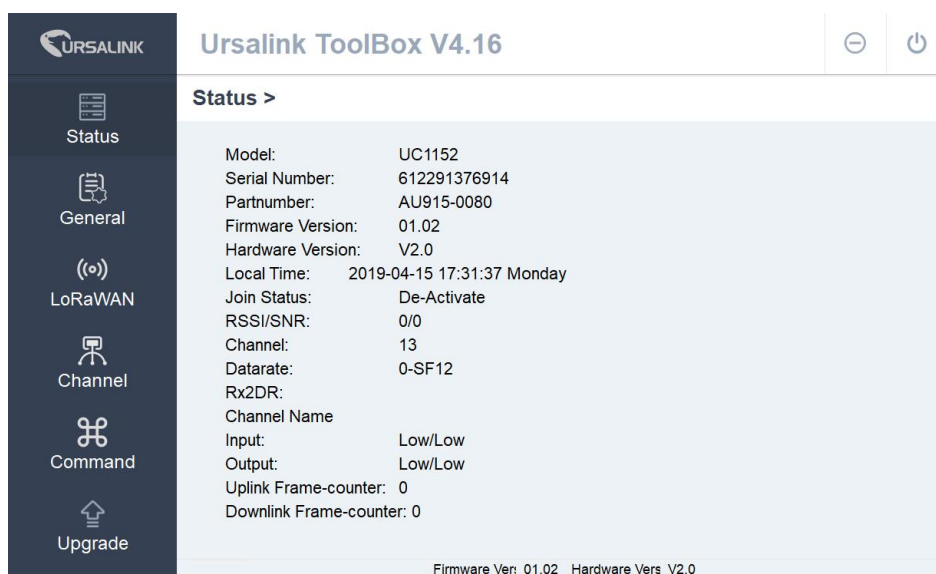
③Click "General" configure report interval, data polling interval and serial parameters

④Click "LoRaWAN" configure the LoRaWAN parameters, Including the EUI, channels.

⑤Click "Channel" configure RS485 modbus master channels

4.2 Configure LoRaWAN Gateway

① Log in the Gateway

A. Start a Web browser on your PC (Chrome and IE are recommended), type in the IP address, and press Enter on your keyboard.

B. Enter the username and password, click "Login".
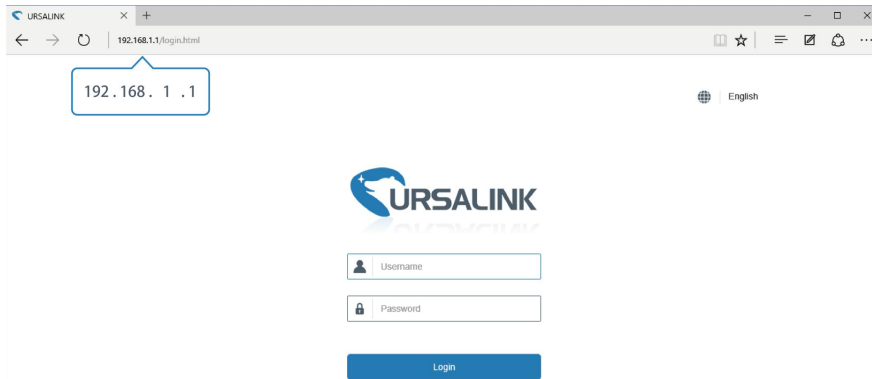
② Click "LoRaWAN → Packet Forwarder → General", disable General Setting.
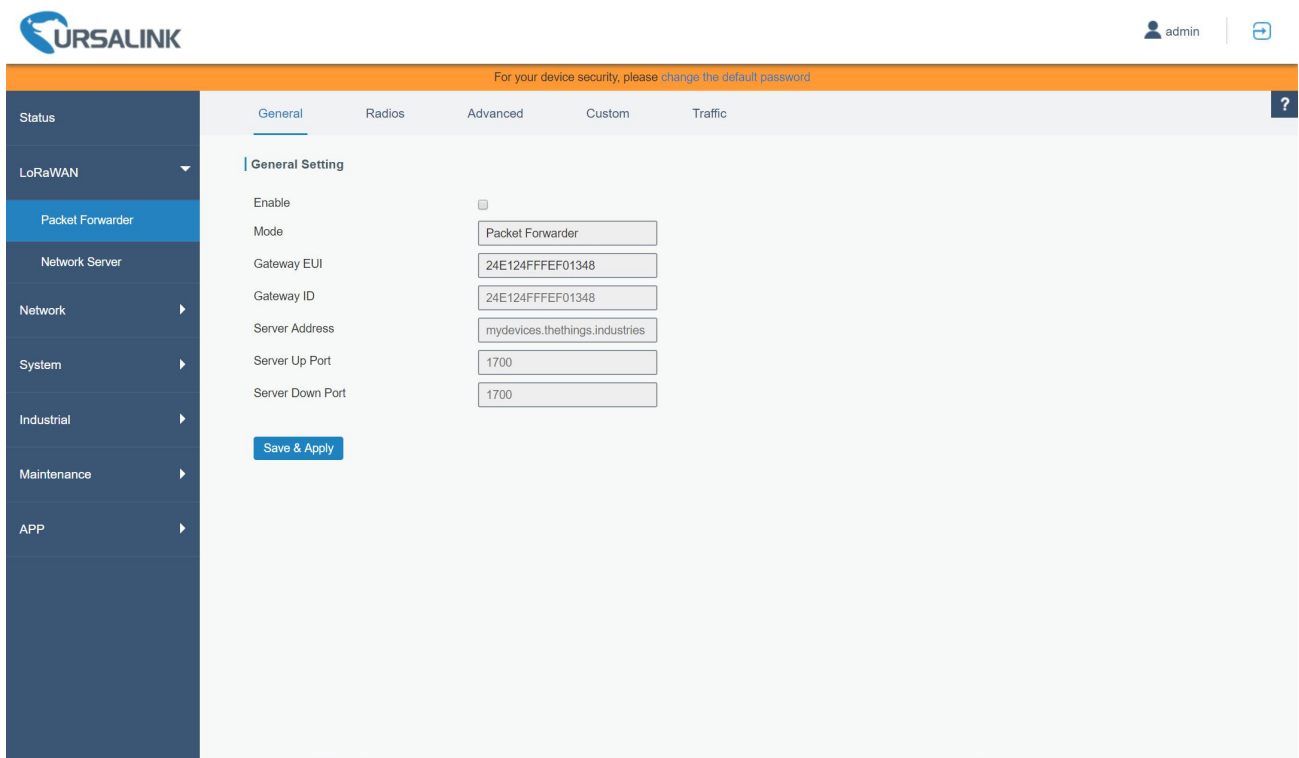
③ Click "LoRaWAN → Packet Forwarder → Radios", configure the frequency and channels of the

④Click "LoRaWAN → Network Server → General", enable embedded Network Server

⑤Click "LoRaWAN → Network Server → Applications", add applications

For your device security, please change the default password

Status					
LoRaWAN ▼	General	Applications	Profiles	Device	Packets

Applications

Name	UC1152
Description	Ursalink
Payload Codec	None ▼

Data Transmission

Type	Operation
	➕

Save   Cancel

⑥Click "LoRaWAN → Network Server → Profiles", add profiles

For your device security, please change the default password

Status					
LoRaWAN ▼	General	Applications	Profiles	Device	Packets

Device Profiles

Name	UC1152
Max TXPower	0
Join Type	OTAA ▼
Class Type	Class C ▼
Advanced	☐

Save   Cancel

⑦Click "LoRaWAN → Network Server → Device", input the device EUI and application key of end node

⑧Check device active status and packets

⑨Click "LoRaWAN → Network Server → Applications", configure sending data from Network Server to Application Server via HTTP or MQTT

[END]