

UC11-N1 Quick Start Guide



Welcome

Thank you for choosing Ursalink UC11-N1.

This guide describes 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 Manual for instructions 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.
Urselink UC11 N1 User Cuide	Users could refer to the guide for instruction on how to configure
Orsannik OCTT-NT OSER Guide	all the settings.

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

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.

1.1 Package Contents











1 × UC11-N1 Device

2 × Data Cable 1 × USB Cable

1 × Magnet Setscrews

1 × Warranty Card

Optional Accessories



2 × Pole Mounting Kit



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

2. Hardware Installation

2.1 USB Configuration

Connect UC11-N1 with laptop via USB cable.





2.2 Mount the UC11-N1

Wall Mounting

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



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



Pole Mounting

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

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





2.3 Turn ON/OFF UC11-N1

Place the magnet on the sign "U" to turn on/off UC11-N1. Beep 2 seconds ON, beep last 6 seconds OFF.





Getting Started



4.1 Configure UC11-T1 via Toolbox

Please connect PC USB port to micro USB port of UC3x series remote cellular I/O directly, PC Setup the Toolbox.

① Select Serial port and fill in the login password, default "123456", then click "Save"

	Ursalink ToolBox V2.4	Θ	
	Serial information >		
Status	Serial Port Settings		
	Serial port COM4 Login password		
General	Baud rate 115200		
	Parity bits None Stop bits 1 ed.		
((•)) LoRaWAN	Save Cancel		

(2) Click "Status" to check property of UC11-N1

	Ursalink ToolBox V2	.4	Θ	
	Status >			
Status	Model: Serial Number:	UC11N1 641192445061		
General	Partnumber: Firmware Version: Hardware Version: RSSI/SNR:	CN470-0080 01.01 V1.1 0/0		

③Click "General/Basic" configure the "Reporting Interval"



	Ursalink ToolBox	c V2.4			Θ	Ċ
	General >					
Status	Basic	Serial	GPIO	AI		_
General		Device ID Description Reporting Interval	641192445061 This is a devic for	S		
((०)) LoRaWAN		Interface 1 (Pin2) 3V3 Output Interface 2 (Pin2) 3V3 Output Change Password				
알 Upgrade						
		Firmware Vers	ion: 01.01 Hardware Vers	ion V1.1		

4 Click "General/Serial" to configure RS485 property and channel

	Ursalink ToolBox V2.	4			Θ	Ċ
	General >					
Status	Basic	Serial	GPIO	AI		
		Enable	\checkmark			_
- And Andrews		Interface Type	RS485 (Modbus N	faster)		
8		Interface 1 (Pin1) 5/9/12V Output	\checkmark			
General		Power Output Time Before Collect	5000	ms		
		Baud Rate	9600	-		
		Data Bit	8 bits	<u> </u>		
((0))		Stop Bit	1 bits	_		
LoRaWAN		Parity	None	•		
		Data Polling Interval	10	S		
		Execution Interval	10	ms		
Ŷ		Max Resp Time	500	ms		
= Upgrade		Max Retry Times	3			
	Channel Settings					-
		Firmware Version: 01.0	1 Hardware Versi	on V1.1		



	Ursalink ToolBox V2.4	Θ	Ċ
	General >		
Status	Basic Serial GPIO AI		
	Parity None -		_
General	Data Polling Interval 10 s Execution Interval 10 ms Max Resp Time 500 ms		
	Max Retry Times 3 Channel Settings		
((0))	Channel ID Name Slave ID Address Quantity Type Sign Value		
LoRaWAN	1 Light 1 6 1 Holding Register(INT16) 0 Fetch	\otimes	
	2 Wind 2 0 1 Holding Register(INT16)	$\otimes \oplus$	_
알 Upgrade	Up	to 8 channels	-

In this quick guide, UC11-T1 connect with two equipment (Light sensor and wind speed sensor), both of the two sensors use Modbus RS485.

Sensor property

Sensor	Serial Port	Slave ID	Register	Туре
Light Sensor	9600 8N1	1	6	Holding Register(INT16)
Wind speed sensor	9600 8N1	2	0	Holding Register(INT16)

Wiring

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

Note: The two sensor is powered up by UC11-N1, need configure "power output before collect", default 5 seconds.

(5) Click "General/GPIO" to configure digital input and output.



	Ursalink ToolBox	(V2.4			\ominus	ப
	General >					
Status	Basic	Serial	GPIO	AI		
		Interface Name	GPIO 1			
General		Enable Interface Type	Digital Input1			
		Status	Low	Fetch		
((0)) LoRaWAN		Interface Name Enable Interface Type	GPI0 2 Digital Input2 Pull Down	ĺ		
ਊ Upgrade		Status	Low	Fetch		

6 Click "General/AI" to configure analog input.

	Ursalink ToolBox	« V2.4			Θ	
	General >					
Status	Basic	Serial	GPIO	AI		_
General		Interface 2 (Pin1) 5/9/12V Output Data Polling Interval	10	s		
((0)) LoRaWAN		Interface Name Enable Status	Analog Input 1	Fetch		
습 Upgrade		Interface Name Enable Status Save	Analog Input 2	Fetch		
		Firmware Vers	sion: 01.01 Hardware Versio	on V1.1		





4.2 Ursalink Gateway Configuration

Enable network server and mode configure as "Ursalink Cloud".

URSALIN	<					💄 admin 🔁
			For your device	e security, please cha	ige the default password	
Status	General	Applications	Profiles	Device	Packets	Help —
						General Setting
LoRaWAN	General Set	ting				Enable
	Enable					Click to enable Network Server mode.
Packet Forwarder	Mada					Mode
Network Server	Mode	UISAIINK CIUU	•			Show the working mode of LoRaWAN
	NetID	010203				NetID
Network	Join Delay	5		Sec		Enter the network identifier. The
	RX1 Delay	1		Sec		Range: 6-digit hexadecimal
System	Lease Time	744-0-0		hh-mm-ss		string
	Log Level	info	•			Enter the interval time between
Industrial						the end-device sends a Join request message to
Maintenance	Channel Pla	in Setting				network server and the end-
	Channel Plar	CN470	•			to receive the
APP	Channel Mas	sk				from network server. The
						BX1 Delay
	Save & App	ply				Enter the interval time between
						the end-device sends uplink packets and the end-device
						prepares to open RX1 to receive the downlink
						packet.The default is 1 sec.
						Lease Time
						a successful join expires. The
						format is hours-minutes-

4.3 Ursalink Cloud Configuration

(1) Register an account of the Ursalink cloud





(2) Login Ursalink Cloud and go to "Gateway/Add" and fill in the gateway SN, click add.

vice	Add Delete						Search	o
y Devices	_							
ateway	Status 🖨	Name 🔶	Model 🔶	Partnumber 🔶	Serial Number 🔶	version 🐥	Update Time 👙	Operation
levice Groups				No matching record	s found			
Event Center								
ccount	,							
				Add Device	×			
			SN		_			
			0.1					
			Please enable	Ursalink Cloud mode on gatew	vay first.			
			Ac	d Cancel				
			Cc	pyngna 2017-2019 Xiamen Uns	uboxTool by Co.14			
			Ca	eyngts 2017-2019 Xiamen Uni	iboxTool <mark>ay</mark> Co.14			
28	Ads Dokelo		C	gyngta 2017-2019 Xiamen Uni	sboxTool <mark>ay Co.,Ltd</mark>		Search	
ce vices	Add Doleto		6	pynght 2017-2019 Xiamen Urg	iboxTool gy Co Ltd		Search	
2e vices	Add Delete Status (Name 🔹	CC Model 🕴	pyrgitt 2017-2019 Xiamen Urfa Partnumber 🛊	ubaxTaali yy Co. Lid Serial Number 🕴	version 🛊	Search Update Time 🛊	Cperr
se • •	Add Delete ■ Status ● ○	Name 🔹	Kodel 🛊 UG874.00E-W-G-EU869	pyrgtt 2017-2019 Xamen Um d Partnumber	uboxTool yay Co. Md Serial Number 🕴 621692473085	version 🛊 Firmware 80.0.24 Hardware X2.0	Search Update Time 🔹 2019-08-06 19:37	Open čē
De Conups Conups Conter	Add Decidio	Name 🔹	Model ¢ UQ87-L00E-W-G-EU888	pyrgtt 2017-2019 Xiamen Urs Partnumber • LODE-W-G-EU898	ubaxTool yay Co. J.M Serial Number 🕴 621692473005	version 🛊 Firmware 80.0.0.24 Hardware V2.0	Search Update Time 🔮 2015-03-05 19:37	Opera (3
pe ▼ vices Groups Center unt ↓	Add Dakhlo ■ Status ■ ○ ■ ○ ■ ○	Name 🔹 My Gateway My Gateway	Model ¢ UG85-L00E-G-U5915	pyrght 2017-2019 Xiamen Urs Partnumber • LORE-W-G-EUR98 LORE-G-US915	iboxTool yay Co. J.M Serial Number ¢ 621952473095 021791878970	version 🛊 Firmware 80.0.24 Hardware V2.0 Firmware 80.0.24 Hardware V1.0	Search Update Time 🔹 2019-08-05 19-37 2019-08-05 19-37	Opera G
ze ₹ vices ay t i Groups Center unt ₹	Add Dabbo ■ Status ■ ○ ■ ○ ■ ○ ■ ○	Name Ny Gateway Ny Gateway Ny Gateway	Model \$ UG87-L00E-W-G-EU889 UG88-L00E-G-U5915 UG85-L00E-G-U5915 UG85-L00E-G-U5915	pyrght 2017-2019 Xiamen Urs of Partnumber Partnumber LORE-W-G-EUR98 LORE-G-US915 LORE-G-EUR98	100xTool yay Co. J.M Serial Number ¢ 621952473095 021791878970	version 4 Firmware 80.0.24 Hardware V2.0 Firmware 80.0.24 Firmware 80.0.20	Search Update Time \$ 2019-08-05 19-37 2019-08-05 19-37 2019-08-05 19-37	Opera G G

③Go to "My Devices" click add. Fill in the SN of the UC11-N1 and select associated gateway.



Device	Add	Delete							Search	0 ⊪-
My Devices										
Gateway		Status 🔶	Name 🔶		Interface Status 🔶			Update Time		Operation
Device Groups			My Device	DI_1	- 0					
Event Center			SN: 611390925393 Model: UC3422	AL_1 AL_2	: - mA	5_1: 🎯				
Account •				4	Add Device	×				
			My Device SN: 611500795270 Model: UC3422	SN	641192445061			2019-06-17 16	:15	
			My Device SN: 61336082069 Model: UC3452	Associated Gateway Device EUI Application Key	My Gateway (621892473086) 24e1641192445061 5572404c698e8b4c6f528132303	•	20194	2019-08-06 20	28	
			My Device SN: 641192416310 Model: UC11-N1	Add GPIO_2	Cancel			2019-08-05 19.	35	
			My Device SN: 641192808420 Model: UC11-N1	GPIO_1 GPIO_2				2019-08-05 19.	37	
	D	8	My Device SN: 641192872241 Model: UC11-N1	GPIO_1 GPIO_2	: 0			2019-08-05 19	37	⊗ >

④ Click
 Other the UC11-N1 from Ursalink cloud, add channel for the Modbus.
 Note: Channel name should be same as the one configure in UC11-N1

	oud					gaga@ursa
Device •						
My Devices			Low Battery Alarm: 🖉			
Gateway	_					
Device Groups		Name	Custom Name	Value	Visualization	
Event Center		GPIO 1(Digital Input)	GPIO_1	Low	8	
Account		GPIO 2(Digital Input)	GPI0_2	Low		
		Name Custom Name	Osh Osl	Unit	Value Visualization	
		Al 1: Al_1	[[Max	< 0.00 mA	
				Min	: 0.00 mA	
		AI 2: AI_2		Max	< 0.00 mA	
				Min	: 0.00 mA	
				Avg	2: 0.00 mA	
	Channel ID Channel	Name Type Sign	Decimal Place Raw Da	ata 🛈 Value	Unit Operation	
	1 v Light	t	0		Lux	
	2 • Wind		0		m/s	
	2 7					
			Save & Apply			

(5) Check the data of the sensors that connect with UC11-N1



	oud				gaga@ursalink.c	om 🖧 🖬 🚺
Device 👻		SN: 641192416310 Model: UC11-N1	GPI0_1: 0		2019-08-05 19:35	@ ~
My Devices	R\$\$I: _30dBm					
Gateway	Battery: 61%					
Device Groups	Associated Gateway: 621692473086	18-				
Event Center	Device EUI: 24e1641192416310 Firmware: v1.5 Hardware: v1.1	12-				
Account •		96				
		4 18:43 18:45 08-05 08-05	19:00 08-05	19:15 08-05	19:30 08-05	19:35 08-05
		My Device SN: 641192445061 Model: UC11-N1	GPI0_1: GPI0_2:		2019-07-30 09:08	®∽ Data
	R\$SI: -65dBm Battery: 100% Group Name: Associated Gateway: 621692473066 Device EU: 24e1641102445061 Firmware: v1.1 Hardware: v1.1	400 300 200 0 1856 07-24	-0- MJ -0- MZ -0-	680_1 -0- 680_2 -0- CHV_1 -0- CHV_2		200 1306 7-25 07-25
	• •	My Device SN: 641192808420 Model: UC11-N1	GPI0_1: GPI0_2:	ч.	2019-08-05 19:37	@ >
		My Device SN: 641192672241 Model: UC11-N1	GPIO_1: O GPIO_2: O		2019-08-05 19:37	@ >

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

[END]