UC11-N1
Sensor Node

LoRaWAN®

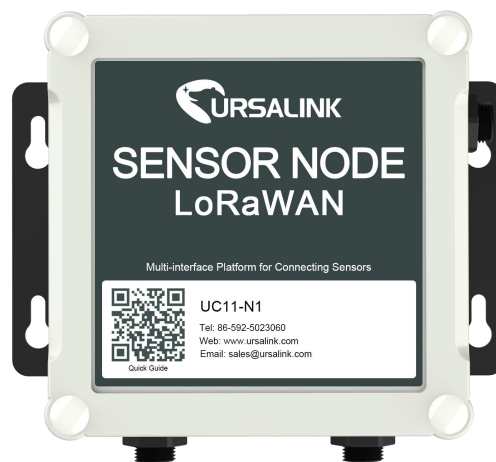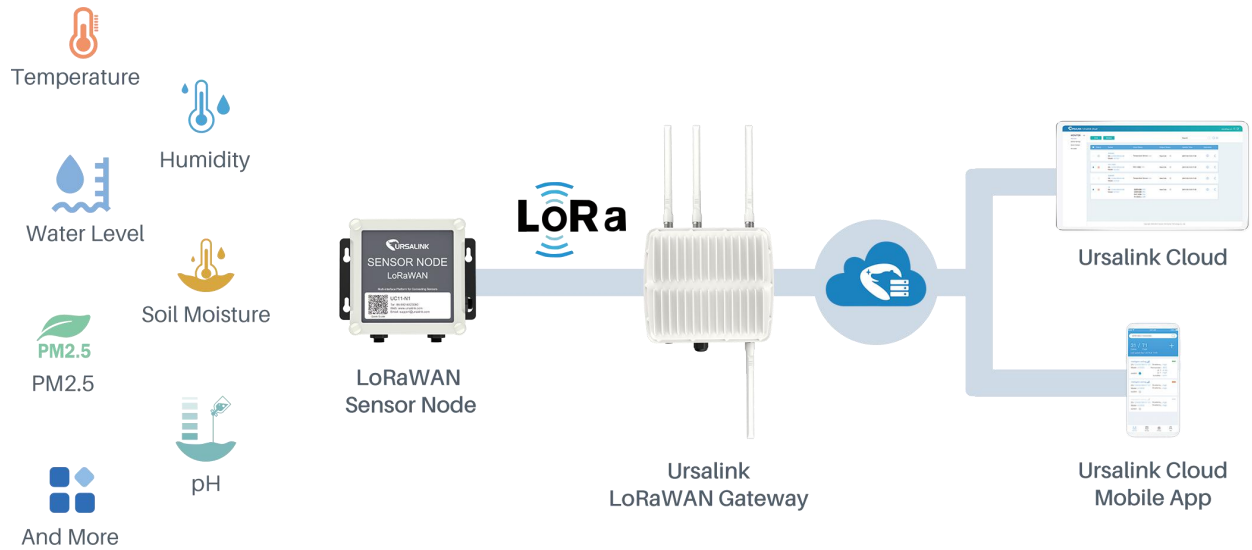**Multi-interface Platform for Connecting Sensors**

▶ Features

- IP67 waterproof for harsh environments

- Multiple interfaces including serial and I/O

- Up to 11km communicate range

- Standard LoRaWAN v1.0/v1.0.2 protocol support

- Ursalink Cloud compliant

- Multiple power supply option: battery, DC or solar

- 5 years life under LoRaWAN Class A mode

▶ Application Example

- Temperature
- Humidity
- Water Level
- Soil Moisture
- PM2.5
- pH
- And More

LoRa

LoRaWAN
Sensor Node

Ursalink
LoRaWAN Gateway

Ursalink Cloud

Ursalink Cloud
Mobile App

▶ Specifications

LoRaWAN	
Frequency	EU433/CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923
Tx Power	20dBm
Sensitivity	-147dBm @300bps
Mode	OTAA/ABP
Interfaces	
Interface Type	M12 A-Coded Male
IO	
Ports	2 × GPIO
Logical Level	Low: 0~0.9V, High: 2.5~3.3V
Work Mode	Digital input, Digital output, Pulse Counter (only GPIO2 supported in N1-DC)
Serial Port	
Ports	1 × RS232 or RS485 (Switchable)
Baud Rate (bps)	1200, 2400, 4800, 9600, 57600, 115200
Protocol	Transparent (RS232), Modbus RTU (RS485)
Analog Input	
Ports	2 × Analog input
Resolution	12 bit
Input Range	4~20mA or 0~10V (Switchable)
Power Output	
Ports	2 × 3.3 V, 2 × 5/9/12 V (Switchable)

Configuration Interface	
Ports	1 × USB
Physical Characteristics	
Operating Temperature	-20°C to +70°C
Ingress Protection	IP67
Dimension	120.1 × 120.1× 55.4 mm (4.73 × 4.73 × 2.18 in)
Power Input	1. 19000mAh replaceable Li-SOCL2 battery 2. 5-24 VDC with 4900mAh battery backup
Power Connector (DC version)	M12 A-Coded 4-pin Male

▶ Dimensions (mm)

URSALINK