

RS485 to LoRaWAN Converter

RS485-LN



OVERVIEW:

The Dragino RS485-LN is a **RS485 to LoRaWAN Converter**. It converts the RS485 signal into LoRaWAN wireless signal which simplify the IoT installation and reduce the installation/maintaining cost.

RS485-LN allows user to **monitor / control RS485 devices** and **reach extremely long ranges**. It provides ultra-long range spread spectrum communication and high interference immunity whilst minimizing current consumption. It targets professional wireless sensor network applications such as irrigation systems, smart metering, smart cities, building automation, and so on.

For data uplink, RS485-LN sends user-defined commands to RS485 devices and gets the return from the RS485 devices. RS485-LN will process these returns according to user-define rules to get the final payload and upload to LoRaWAN server.

For data downlink, RS485-LN runs in LoRaWAN Class C. When there downlink commands from LoRaWAN server, RS485-LN will forward the commands from LoRaWAN server to RS485 devices.

Features:

- Support Modbus protocol
- Support Interrupt uplink
- AT Commands to change parameters
- Firmware upgradable via program port
- Remote configure parameters via LoRa Downlink
- Support multiply RS485 devices by flexible rules
- LoRaWAN Class A & Class C protocol (default Class C)
- Bands: CN470/EU433/KR920/US915/EU868/AS923/AU915/IN865/RU864/MA869

Applications:

- Smart Cities
- Smart Factory
- Smart Metering
- Smart Agriculture
- Smart Buildings & Home Automation
- Logistics and Supply Chain Management

Specifications:

Hardware System:

- STM32L072xxxx MCU
- SX1276/78 Wireless Chip
- Power Consumption (exclude RS485 device):
 - Idle: 32mA@12v
 - 20dB Transmit: 65mA@12v

Working Condition:

- Operation Temperature: -40 ~ 65°C
- Storage Temperature: -40 ~ 65°C

Interface for Model:

- RS485 x 1
- Power Input 7~24V

Order Info: RS485-LN-XX

XX: Frequency band , includes:
EU868, US915, AU915, AS923, EU433
IN865, KR920, KZ865, RU864 or CN470