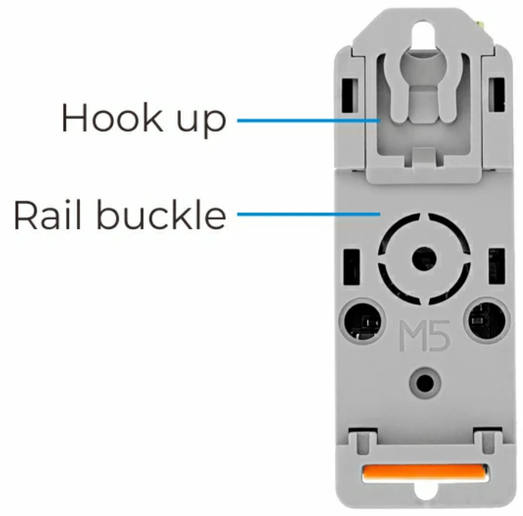
ATOM DTU LoRaWAN915

SKU:K061



Description

ATOM DTU LoRaWAN915 is a LoRaWAN Programmable Data Transmission Unit (DTU) suitable for 915MHz frequency. The module adopts the ASR6501 scheme, which supports long-distance communication and has both ultra-low power consumption and high sensitivity. The module integrates the LoRaWAN protocol stack and adopts a serial communication interface (using AT command set for control). When used, it can be used as a collection node to access a large number of gateways for data collection and management. Integrate SMA external antenna interface to improve the communication quality and signal stability of the device. Unlike the DTU which generally only has the function of data transparent transmission, the ATOM DTU series adopts a more open architecture design. The controller ATOM LITE can modify the program at will according to the actual business. The whole machine reserves a variety of interfaces (RS485, I2C, custom interface) for user expansion, which is convenient for the rapid access of sensors and actuators. With its own guide rail clamping structure, it is perfectly embedded in various industrial control sites.

Product Features

- ASR6501
- Operating frequency: 915MHz
- Serial communication: UART 115200bps (AT command)
- With super anti-interference ability, able to work normally in complex interference environment
- RS485 communication interface (with 12V input interface, internal integrated DCDC step-down 5V)
- Modbus Master/slave
- Strong signal access capability
- External antenna: SMA antenna interface
- Grove expansion interface: -I2C x1 -Custom x1
- Self-contained rail clamping

Includes

- 1x ATOM DTU LoRaWAN470
- 1x SMA antenna
- 1x SMA red cap

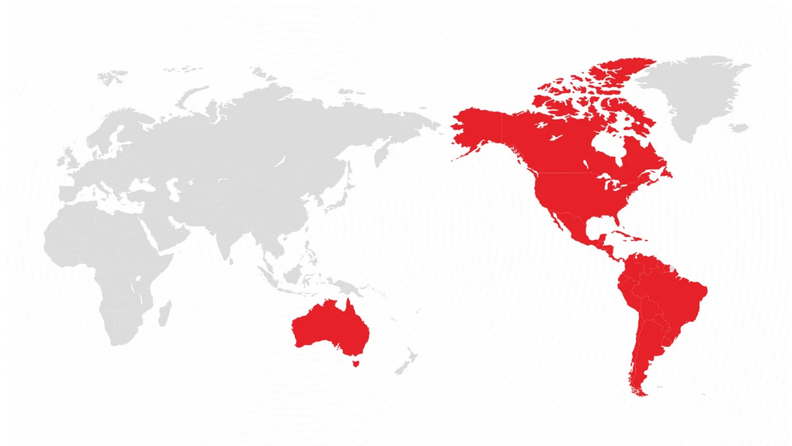
- 1x M2 hexagon wrench
- 1x M2x16 screw
- 1x 3.96-4P terminal

Application

- Automatic remote meter reading
- Intelligent traffic intelligent parking lot
- Remote irrigation and environmental monitoring

915MHz supported countries

Argentina/Australia/Bolivia/Brazil/Canada/Chile/Colombia/Dominican Republic/Ecuador/Greece Guatemala/Honduras/Jamaica/Mexico/New Zealand/Nicaragua/Panama/Panama/Paraguay/Peru/Papua New Guinea/El Salvador/USA/ Uruguay



Specifications

Resources	Parameter
Communication chip	ASR6501
Operating frequency	915MHz
Minimum receiving sensitivity	-137dBm (SF=12/BW=125KHz)
Maximum transmit power	+21dBm
communication	UART 115200bps
Net weight	32g
Gross weight	40g
Product Size	64 * 24 * 29mm
Package Size	91 * 42 * 24.5mm

Pin mapping

- LoRaWAN915

ATOM	G22(TX)	G19(RX)	5V	GND

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LoRaWAN915	RX	TX	VIN	GND

- RS485

ATOM	G23	G33	5V	GND
RS485	TX	RX	VIN	GND

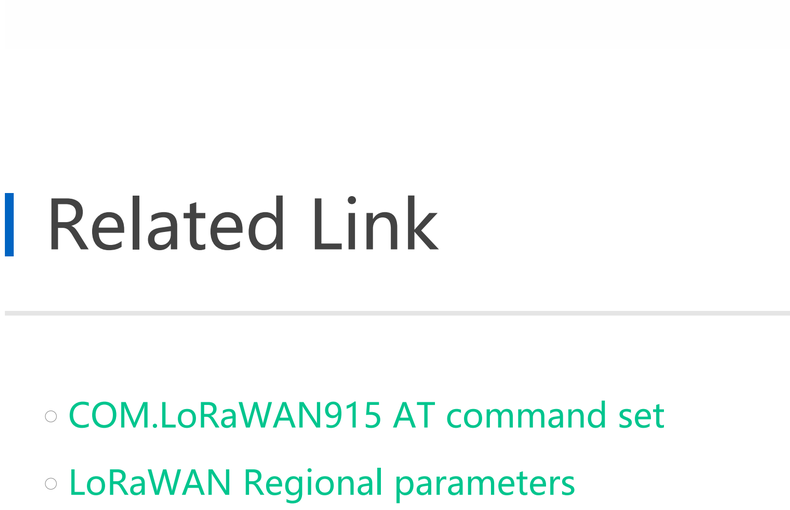
- I2C

ATOM	G25	G21	5V	GND
I2C	SDA	SCL	VIN	GND

Related Link

- COM.LoRaWAN915 AT command set
- LoRaWAN Regional parameters

Schematic



Example

Arduino

- ATOM DTU LoRaWAN - Send Msg to Gateway