



Brief Introduction

LoRun® M120 series LoRa module is self-developed by Easylinkin. It is integrated with LoRaWAN protocol stack, compatible with LoRaWAN specification (V1.0.2, Class A/C) released by LoRa Alliance, which supports the connectivity function for different devices. The module can support wide frequency band 470~510MHz or 862~923MHz.

M120 module uses Semtech's SX1278/6 chip, has many features as low power, long range and high anti-interference etc, which can be used in many applications as smart metering, smart city and smart building etc.

Features

- Low power consumption: minimum standby current 3.5uA
- High sensitivity: up to -139dBm@SF12/125KHz
- Compliant with LoRaWAN Specification 1.0.2
- Support LoRaWAN Class A/B/C with integration of LoRaWAN protocol stack
- UART interface, stamp hole, support parameters configuration through AT command.

APPLICATIONS



Electricity/Water/Gas Metering



Public Security



Smart City



Environment Monitoring



Agricultural and Rural IoT



Industrial Automation/Control

Specification

	Specification	Description
Appearance	Model	M120
	Protocol	LoRaWAN V1.0.2
Transmission	Topology	Star
	Device Type	Class A/Class C
	Activation Mode	OTAA/ABP
	Modulation	CSS (Chirp Spread Spectrum)
	Frequency Band	470MHz/510MHz/868MHz/915MHz/923MHz
	Center Frequency	Can be customized
	Bandwidth	125/250/500KHz configurable
	Data Rate	0.018-37.5kbps
	RX Power	+19dBm (max)
	TX Sensitivity	-139dBm@SF12/125KHz
	Transmission	Supply Voltage
IOs		GPIO*4, UART*1, I2C*1 (Reserved)
Baud Rate Of Serial Por		1200/2400/4800/9600/19200/38400/57600/115200bps, default is 9600bps
Antenna Interface		IPEX base/Stamp hole, default is IPEX base
Antenna Type		Omni directional or Directional (Spring Antenna is recommended)
Pin Encapsulation		Stamp hole
Dimension		15.5(L)*15(W)*2.5(H)mm (SMA connector not included)
Others	Operating Environment	-40°C--85°C, 10%--90%RH
	Storage Environment	-40°C--105°C, 5%--95%RH

About LoRaWAN™

LoRaWAN™ is a long range radio frequency protocol that allows things to connect to the internet over a long range with low power consumption. Low Power, Wide Area Networks (LPWAN) are projected to support a major portion of the billions of devices forecasted for the Internet of Things (IoT). LoRaWAN™ is designed from the bottom up to optimize LPWANs for battery lifetime, capacity, range, and cost.

About EasyLinkin

Founded in Y2017, EasyLinkin is a leading LoRaWAN solution provider based in Shenzhen, China. EasyLinkin develops and promotes innovative solutions to meet the unique challenges facing LPWAN.