

Module-LoRa868_V1.1

SKU:M029-V11



Description

The **LoRa868_V1.1 Module** is a part of the M5Stack stackable module series and is a LoRa communication module operating at a frequency of 868MHz, utilizing the **Ra-01H module** (SX1276 chip) solution. This module comes with a default **external SMA antenna** and also features two additional patch MCX antenna pad interfaces, allowing users to switch between different types of antennas based on their needs. Additionally, the module is equipped with a **dip switch**, enabling users to easily switch between different communication pins. It supports multiple stackable uses simultaneously, offering more customization and flexibility. It is suitable for remote monitoring, smart cities, home and industrial automation, IoT devices, and more.

Features

- Serial communication protocol: SPI
- Ra-01H Module

- Dip switch Switches I/O
- multiple stacks
- Operating frequency: 803~930 MHz
- Supports FSK,GFSK,MSK,GMSK,LoRa™ and OOK modulation modes
- Reception sensitivity: as low as -140 dBm
- Programmable bit rate up to 300Kbps
- External antenna interface
- Built-in dip switch toggle pin
- Development platform: Arduino, Micropython, UIFlow(Blockly)

Includes

- 1x LoRa868_V1.1 Module
- 1x SMA External Antenna

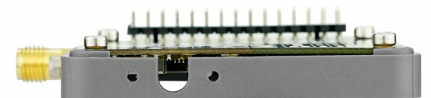
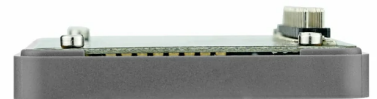
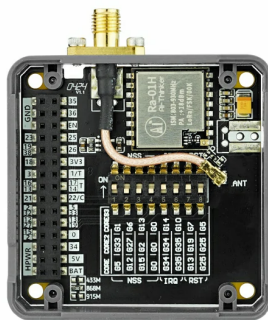
Applications

- Remote Control
- Intelligent city
- Home and industrial automation
- Internet of Things (IoT) devices

Specification

Resources	Parameters
Spectral range	803~930MHz
Communication interface	SPI

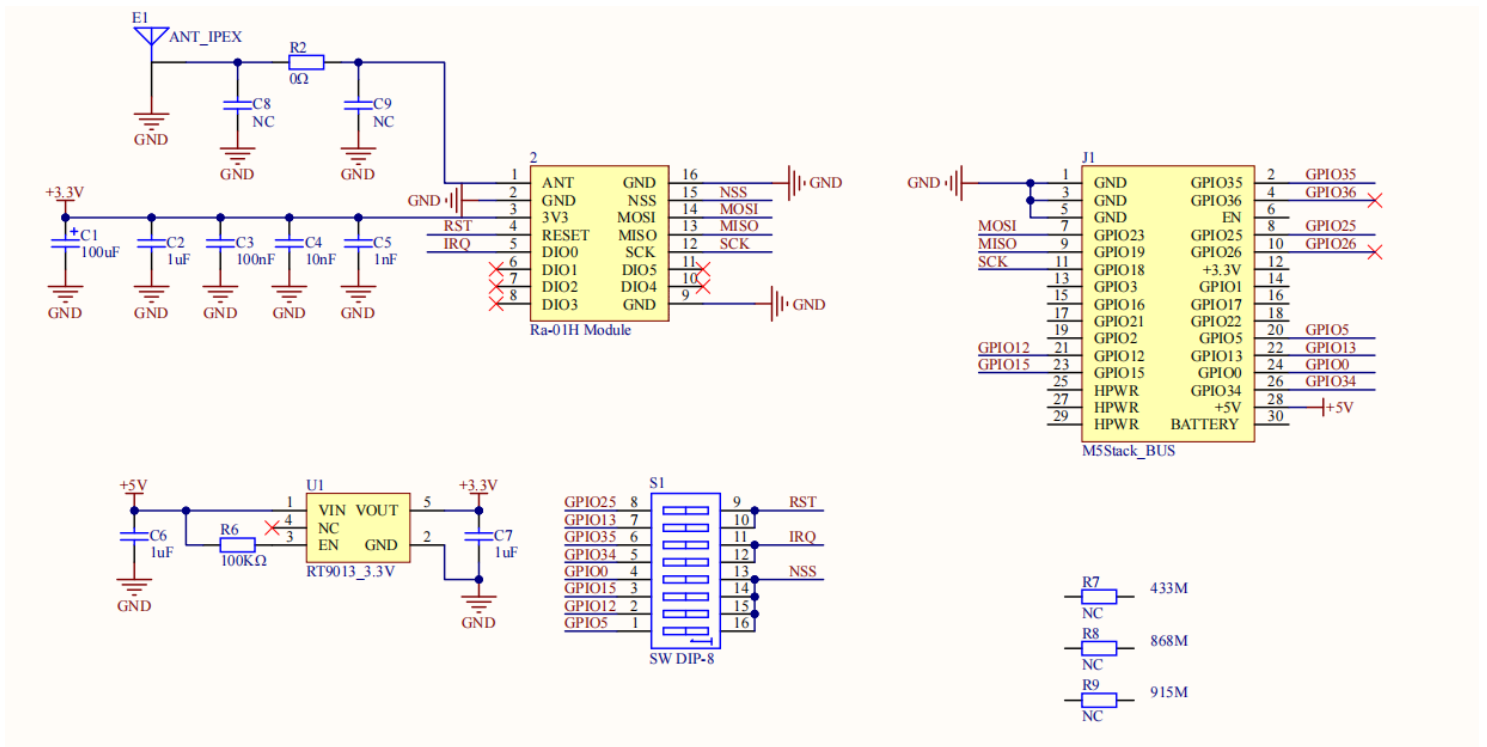
Programmable bit rate	Up to 300kbps
Antenna	Glue stick antenna @2.5dBi
Standby Current	DC5V/1.74mA
Operating Current	DC5V/19.98mA
Operating temperature	0-40°C
Product Size	54*54*13.1mm
Package Size	92*63*25mm
Product Weight	16.1g
Package Weight	44.6g



Related Link

- [RA-01H](#)
- [SX127X](#)

Schematic

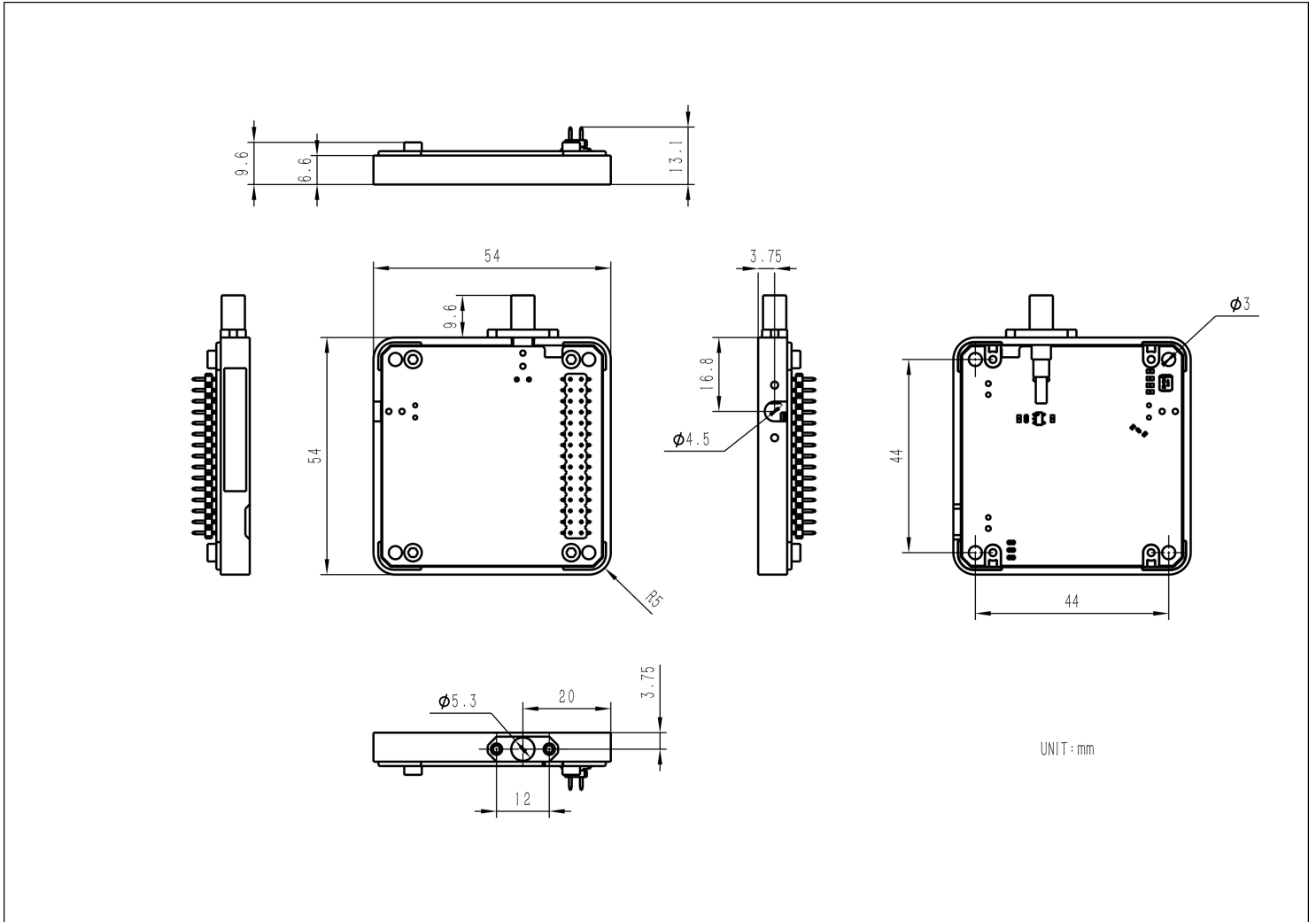


PinMap

RA-01H	MOSI	MISO	SCK	RST	IRQ	NSS
Core (Basic)	G23	G19	G18	G25/G13	G35/G34	G0/G15/G12/G5

Core2	G23	G38	G18	G25/G19	G35/G34	G0/G2/G27/G33
CoreS3	G37	G35	G36	G5/G17	G10/G14	G0/G13/G6/G1

Module Size



Examples

Arduino

- [LoRa868_V1.1 Module Arduino Library](#)

- [LoRa868_V1.1 Module Arduino Demo\(LoRaSender\)](#)
- [LoRa868_V1.1 Module Arduino Demo\(LoRaReceiver\)](#)
- [LoRa868_V1.1 Module Arduino Demo\(LoRaSetSpread\)](#)
- [LoRa868_V1.1 Module Arduino Demo\(LoRaDuplex\)](#)

Video

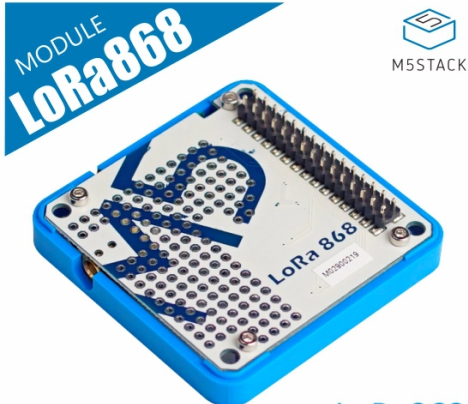
- [LoRa868_V1.1 Module Product introduction and function demo](#)

[M029-V11 LoRa868 V1.1 Module 视频.mp4](#)

Version Change

Listing Date	Change	Note
/	Product Release d LoRa868 (SKU:M029)	/
	LoRa868	Compared with the previous version, the dip switch is added,

Listing 2024.0	Change _V1.1(SK	<p>which can switch different communication pins, suitable for Note</p> <p>M5Core\M5Core2\M5CoreS3 generation host, and can also be</p> <p>used for multiple stacks</p>
Date 4.19	U:M029	
	_V11)	




**MODULE
LoRa868**

M5STACK

803~930MHz
Built-in Antenna

**LoRa868
MODULE**



**MODULE
LoRa868 V1.1**

M5STACK

SMA

ANTENNA

DIP SWITCH

**SPI
INTERFACE**
Ra-01H
SX1276
PA: +18dBm
803~930 MHz

COMPATIBLE & NOT INCLUDE

CORE CORE2 CORE S3