Product description

RHF0M084 is a low-cost, ultra-low power consumption, ultra-small size LoRaWAN® module designed by Ruixing Hengfang Network (Shenzhen) Co., Ltd. The module uses ST system-on-chip STM32WLE5JC, internally integrated high-performance LoRa® SX126X IP and ultra-low The power consumption MCU is also equipped with Semitach's proprietary 2.4G long-distance transceiver SX1281. The target application of this module is wireless sensor network and other Internet of Things devices, especially where battery power requires low power consumption and long distance.

Product outline

Application

- LoRaWAN® node
- Home automation applications
- Smart security
- Low-power wireless sensor network
- 2.4GHz remote application

Features

- Low power consumption: as low as 2uA sleep current (WOR mode)

- Small size: 28mm X 23mm X 2.8mm 33 pins SMT

- High performance:

  High transmit power::

- TXOP=22dBm@470MHz
- TXOP=22dBm@868/915MHz
- TXOP=13dBm@2400MHz

High receiving sensitivity:

- 470MHz:-134 dBm sensitivity for SF12 with 125KHz BW
- 868MHz:-132 dBm sensitivity for SF12 with 125KHz BW
- 2400MHz:-130 dBm sensitivity for SF12 with 125KHz BW

- Interface

  - SPI
  - USART
  - I2C
  - ADC
  - GPIO
  - SWD

- Embedded LoRaWAN® protocol, AT command, support global LoRaWAN® frequency plan

  - EU868
  - US915 and US915 Hybrid
  - CN779
  - AU915
  - CN470 and CN470 Prequet
  - AS923
  - KR920
  - IN865

Ordering Information

Different specifications, sub-models and corresponding descriptions of the product

Number	Part Number	MCU	TX Power (dBm)	AT Modem
1	**RHF0M084**	**ROM 256KB / RAM 60KB**	**22dBm@LF(470MHz)** **22dBm@(868/915MHz)** **13dBm@2400MHz**	**Yes**

Contact information

Contact salescn@risinghf.com for more ordering information.