Ultra low power LoRaWAN® Modem

DESCRIPTION

RHF0M0E5 is a low-cost, ultra-low power, ultra-small LoRaWAN® module designed by Ruixing Hengfang Network (Shenzhen) Co., Ltd. The module adopts ST system on chip STM32WLE5JC, intergrated with high-performance LoRa® SX126X IP and ultra-low power consumption MCU. The module's target applications are wireless sensor networks and other IoT devices, especially where battery power requires low power and long distances.

APPLICATIONS

- LoRaWAN® node
- AMR
- Industrial control
- Internet of Things
- Security and alarm system
- Wearable devices

FEATURES

- Low power consumption: as low as 2.1uA sleep current (WOR mode)
- low cost: Intergrated with SX126X IP and cost-effective MCU
- Small size: 12mm X 12mm X 2.5mm 28 pins SMT
- High performance：

  RHF0M0E5-LF22:
  - TXOP=10dBm@434MHz
  - TXOP=22dBm@470MHz

  RHF0M0E5-HF22:
  - TXOP=22dBm@868/915MHz
  - -136.5dBm sensitivity for SF12 with 125KHz BW
  - 160dB link budget, suitable for long range
- User-friendly interface
  - USART
  - I2C
  - SWD
  - ADC

- Support global LoRaWAN® protocol
  - ➢ EU868
  - ➢ US915 and US915 Hybrid
  - ➢ CN779
  - ➢ AU915
  - ➢ CN470 and CN470 Prequel
  - ➢ AS923
  - ➢ KR920
  - ➢ IN865

ORDERING INFORMATION

Part Number	MCU	TX Power (dBm)	AT Modem
RHF0M0E5-LF22	ROM 256KB / RAM 64KB	10@LF(434MHz) 22@LF (470MHz)	Yes
RHF0M0E5-HF22	ROM 256KB / RAM 64KB	22@HF (868/915MHz)	Yes

CONTACT

E-mail salesww@risinghf.com for more ordering information.