Ultra low power LoRaWAN® Modem

DESCRIPTION

RHF0M0E5 is a low-cost, ultra-low power, ultra-small LoRaWAN® module designed by RisingHF Network (Shenzhen) Co., Ltd. The module adopts ST system on chip STM32WLE5, integrated 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=22dBm@434/470MHz
  - RHF0M0E5-HF14:
    TXOP=14dBm@868MHz
  - RHF0M0E5-HF22:
    TXOP=22dBm@868/915MHz
  - -136.5dBm sensitivity for SF12 with 125KHz BW
  - 158dB link budget, suitable for long distance
- 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 64~256KB / RAM 64KB	22dBm@LF (434/470MHz)	Yes
RHF0M0E5-HF14	ROM 64~256KB / RAM 64KB	14 dBm @HF (868MHz)	Yes
RHF0M0E5-HF22	ROM 64~256KB / RAM 64KB	22 dBm @HF (868/915MHz)	Yes

CONTACT

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