

RM-SS2

Ultra-Low-Power Sub-GHz RF Module

The RM-SS2 is a sub-GHz radio module targeted for applications where proven reliability, highly flexible network and low-power performance are key requirements.

The RM-SS2 module is based on STM S2-LP transceiver and ultra-low-power STM32L0 host MCU. The module operates in the 868 to 930 MHz frequency range. Module features top-notch RF performances and unparalleled energy efficiency extending battery life from months to more than 10 years.

The RM-SS2 module is ready for SIGFOX and Wireless M-Bus networking connectivity.



MAIN APPLICATIONS

- Ultra-Low-Power Wireless Networking
- IoT Battery Powered Devices
- Smart Home / Smart Metering
- Industrial Monitoring and Control
- Smart Parking
- Asset Tracking Devices

KEY FEATURES

MCU

- 32-bit ARM® Cortex®-M0+ core with MPU
- From 32 kHz up to 32 MHz clock speed
- 0.95 DMIPS/MHz
- Up to 192kB Flash memory, 20kB RAM, 6kB of data EEPROM with ECC
- 0.29 μ A Standby mode (3 wakeup pins)
- Down to 93 μ A/MHz in Run mode

RF TRANSCEIVER

- Frequency bands: 413-479 / 826-958 MHz
- Modulation schemes: 2(G)FSK, 4(G)FSK, OOK, ASK
- Air data rate from 0.1 to 500 kbps
- Ultra-low power consumption: 7 mA RX
10 mA TX @ +10 dBm
- Receiver sensitivity: down to -130 dBm
- RF output power up to +16 dBm

MODULE

- Size: 12.0 x 18.0 x 2.6 mm (RM-SS2-P)
- Operating Temperature: -20 to +85°C
- CE Certified

Product Code	Description
RM-SS2-P1B	RF pin • 128 kB Flash • 20 kB RAM
RM-SS2-P1Z	RF pin • 192 kB Flash • 20 kB RAM
RM-SS2-P1B	u.FL connector • 128 kB Flash • 20 kB RAM
RM-SS2-P1Z	u.FL connector • 192 kB Flash • 20 kB RAM