

## 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
- Distributed Wireless Sensor Networks

### KEY FEATURES

- 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 µA Standby mode (3 wakeup pins)
- Down to 93 µA/MHz in Run mode

### RF TRANSCEIVER

- Frequency band(s): 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

### SPECIFICATIONS

Power Supply	1.8V to 3.6V
Output Power	+16 dBm
Receiver Sensitivity	-130 dBm
Operating Temperature	-20°C to +85°C
Standby Current	1µA
Transmission Current	10mA @ +10 dBm
Reception Current	7mA
Size (RM-SS2-P)	12.0 x 18.0 x 2.6 mm
Certifications	