

Features, applications and specifications

The main applications, a summary of features, and the main specifications of the module are provided below.

Main applications

1. Remote keyless entry systems & passive entry systems
2. Short-range wireless communications transmitters
3. Garage door openers
4. RFID tag transmitters

Summary of features

1. Fractional-N PLL*
2. Output power: Programmable in 128 steps from -15 dBm to +11 dBm
3. Modulation methods: Amplitude shift keying (ASK), on-off keying (OOK), and frequency shift keying (FSK)
4. Soft-ASK and/or Soft-FSK shaping to limit the transmission band
5. 3-wire or 4-wire SPI interface used to control operations
6. Programmable clock output via CKOUT

Main specifications

Model No.	SR3225SAA
Carrier frequency bands	300 MHz to 465 MHz and 600 MHz to 930 MHz
Power supply voltage	1.8 V to 3.6 V
Operating temperature range	-40°C to +85°C
Power supply current	20 nA typ. (Powerdown mode) 15 mA typ. (315 MHz in Transmitter-Active mode, at 10 dBm output)
Internal crystal frequency tolerance	±2 ppm (excluding ageing)
Internal crystal frequency-temperature characteristics	± 20 ppm
Nominal output power	+11 dBm, typ. (315 MHz, max. output setting) -15 dBm, typ. (315 MHz, min. output setting)
Dimensions	3225: 3.2 x 2.5 x 1.0 mm, typ.

* Fractional-N PLL:

A fractional-N phase locked loop is a circuit that generates a desired output frequency based on a clock signal of a certain frequency.