

New LoRa®

Sub-GHz Radio Transceivers

Offering **Best In Class Range** in Any RF Environment For Reliable, Low Data Rate and Low Power Communications

SX1261, SX1262 & SX1268 PRODUCTS

These devices are designed for multi-year battery life with just 4.6 mA of active receive current consumption. With support for LoRa modulation for LPWAN use cases and (G)FSK modulation for legacy use cases, the devices are compatible with existing LoRaWAN™ networks and can support proprietary protocols.

The radio is suitable for systems targeting compliance with radio regulations including, but not limited to, ETSI EN 300 220, FCC CFR 47 Part 15, China regulatory requirements, and the Japanese ARIB T-108. Continuous frequency coverage from 150 MHz to 960 MHz allows the support of all major sub-GHz ISM bands around the world.





SEMTECH

SX1261

New LoRa® Sub-GHz Radio Transceivers

Applications

- Smart meters
- Supply chain and logistics (trackers)
- Building automation
- Agricultural sensors
- Smart city sensors

- Environmental sensors
- Healthcare
- Safety and security sensors
- Predictive maintenance
- Leak detection

LONG RANGE

- High sensitivity down to -148 dBm
- +22 dBm output power with high efficiency PA
- 170 dB maximum link budget

SUPPORTED MODULATION

- LoRa 18 bps up to 62.5 kbps
- (G)FSK/MSK up to 300 kbps

LOW SYSTEM COST

- Minimal external BOM/matching
- Small size foot print, 24-pin 4x4
- Works with existing LoRaWAN gateways

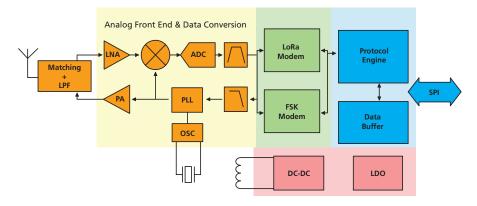
LOW CURRENT

- <5 mA RX current consumption</p>
- 25 mA TX @ +14dBm
- Integrated DC-DC and LDO

FLEXIBLE CONFIGURATION

- Simple command based interface
- Global frequency coverage
- Supports LoRaWAN and other protocols

Block Diagram



Part Number	Tx Power	Rx Current	Frequency Range	Package (mm)
SX1261IMLTRT	+15 dBm	4.6mA	150-960 MHz	QFN 4x4
SX1262IMLTRT	+22 dBm	4.6mA	150-960 MHz	QFN 4x4
SX1268IMLTRT	+22 dBm	4.6mA	410-810 MHz	QFN 4x4

