

# LoRaWAN Modules

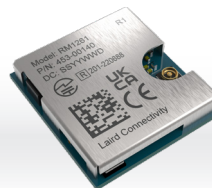
Our growing LoRaWAN ecosystem leverages years of RF expertise to enable secure, low-power, long-range IoT sensor and gateway deployment easily using LoRaWAN technology. The LoRaWAN protocol targets key IoT requirements such as bi-directional communication, end-to-end security, mobility, and localization services. Our portfolio of LoRaWAN solutions delivers high performance with unparalleled design flexibility.

Modules not shown at actual size.



## New: RM126x Series

<b>Chipset</b>	Silicon Labs EFR32 SOC Semtech SX126x radio
<b>Technology</b>	LoRaWAN
<b>Protocol</b>	LoRaWAN A/B/C / LoRa P2P
<b>Physical Interface</b>	SMT
<b>Frequency</b>	RM1262: 902-928 MHz RM1261: 863-870 MHz
<b>Range (Line of Sight)</b>	Up to 15km
<b>Size</b>	14 x 13 x 2.5
<b>RF Rate</b>	LoRa: 125/250/500kHz, FSK 50kbps
<b>Output Power</b>	RM1262 - Up to 22dBm RM1261 - Up to 14dBm
<b>Receiver Sensitivity</b>	-125.6 dBm (SF7, 125kHz, 903.0MHz) -139.2 dBm (SF12, 125kHz, 863.1MHz) -122.7 dBm (SF7, 250kHz, 869.9MHz) -130.8 dBm (SF12, 500kHz, 923.3MHz)
<b>Temp. Range (Operational)</b>	-40° to +85°C
<b>Software</b>	AT Command Set or Simplicity Studio
<b>Certifications</b>	RM1262: FCC, ISSED, AS/NZS RM1261: EU, UKCA, NCC, MIC, IN
<b>Interface Buffer</b>	N/A
<b>Supply Voltage</b>	2V-3.6V (Nominal 3.3V)



The Laird Connectivity RM126x series of modules (RM1261 and RM1262) is based on Silicon Labs EFR32 SoC and the Semtech SX126x radio. They provide a low power, long range solution for you to easily develop your LoRaWAN implementation. The RM126x series supports LoRaWAN classes A, B and C, and also includes a LoRa Point to Point (LoRa P2P) capability which enables you to create your own private ultra-long range radio network between two RM126x modules.

- **Hosted Mode** - Connect to external MCU and program with our AT command set.
- **Hostless Mode** - Powerful Cortex-M33 core, 512kB flash and 32K of RAM, program with Silicon Labs' Simplicity Studio and our sample applications.
- **Small Form Factor** - 14mm x 13mm PCB module for compact IoT devices.
- **LoRa P2P** - Create your own proprietary wireless network.
- **Quick to market** - Built in TCXO, DC-DC converter, onboard MHF4 connector.
- **Ultra-Low Power Consumption** - Years of use on a single battery.

Pre-certified sub-GHz antennas available in 868 / 915 MHz options:

### 868/915 MHz FlexPIFA

Flexible, peel-and-stick adhesive antennas with exceptional performance.



### 868/915 MHz i-FlexPIFA

Radiates in the direction of the adhesive for mounting to top/front interior of enclosure.



For documentation, schematics, 3D models, and a chance to win an RM126x Series Development board, visit us at:

[www.lairdconnect.com/rm126x-series](http://www.lairdconnect.com/rm126x-series)