

RAK5146 WisLink LPWAN Concentrator

Thank you for choosing **RAK5146 WisLink LPWAN Concentrator** in your awesome IoT Project! 🎉 To help you get started, we have provided you all the necessary documentations for your product.

- [Datasheet](#)
- [RAK5146 USB Latest Firmware](#) 

Product Description

RAK5146 is an LPWAN Concentrator Module with mini-PCIe form factor based on Semtech SX1303 and SX126X for Listen Before Talk feature, which enables easy integration into an existing router or other network equipment with LPWAN Gateway capabilities. It can be used in any embedded platform offering a free mini-PCIe slot with SPI/USB connection. Furthermore, ZOE- M8Q GPS chip is integrated onboard.

This module is an exceptional, complete, and cost-efficient gateway solution offering up to 10 programmable parallel demodulation paths, 8 x 8 channel LoRa packet detectors, 8 x SF5-SF12 LoRa demodulators, and 8 x SF5-SF10 LoRa demodulators. It is capable of detecting an uninterrupted combination of packets at 8 different spreading factors and 10 channels with continuous demodulation of up to 16 packets. This product is best for smart metering fixed networks and Internet-of-Things (IoT) applications.

Product Features

- Designed based on **Mini PCI-e form factor**.
- **SX1303 baseband processor** emulates 8x 8 channel LoRa packet detectors, 8x SF5-SF12 LoRa demodulators, 8x SF5-SF10 LoRa demodulators, one 125 /250 / 500 kHz high-speed LoRa demodulator, and one (G)FSK demodulator.
- 3.3v **Mini PCI-e**, compatible with **3G/LTE card** of Mini PCI-e type.
- Tx power up to 27dBm, Rx sensitivity down to -139dBm@SF12, BW 125 kHz.
- Supports **global license-free frequency band** (EU868, CN470, US915, AS923, AU915, KR920, IN865).
- Supports optional **SPI/USB** interfaces.
- Listen Before Talk
- Fine Timestamp.
- Built-in **ZOE-M8Q** GPS module.

Last Updated: 9/16/2021, 3:31:43 AM
