

## LoRaWAN Concentrator

# PG1302





### **OVERVIEW:**

The PG1302 is a multi-channel high performance transmitter/receiver designed to simultaneously receive several LoRa packets using random spreading factors on random channels. Its goal is to enable robust connection between a central wireless data concentrator and a massive amount of wireless end-points spread over a very wide range of distances.

The PG1302 is design to use with Raspberry Pi to build smart metering fixed networks and Internetof Things applications with up to 5000 nodes per km2 in moderately interfered environment.

PG1302 is fully compatible with RPi3/4 or Tinker Board, users can use the pre-build OS from Dragino to set up and easy to use the module by Web UI. Or install the raw LoRaWAN driver in the existing OS.

#### Features:

- Support 3.3v and 5v
- Mini-PCle Interface
- Up to -140dBm sensitivity
- Support Raspberry Pi 3B/3B+/4
- Base on Semtech SX1302 solution
- Converter board to support Raspberry Pi

#### **Applications:**

- Smart Cities
- Smart Factory
- Smart Metering
- Smart Agriculture
- Smart Buildings & Home Automation
- Logistics and Supply Chain Management

### Specifications:

#### Hardware:

- CPU: RPI4/4B/3B/Zero
- RAM: 2G, 4G or 8G
- Memory: Greater than 16GB SD card
- LoRaWAN Max Output: 27dBm
- Sensitivity: -140dBm

#### **General Interfaces:**

- SPI interface for LoRa
- 1 x I-PEX for LoRa
- Power Input: 5v, 1A
- Working Temperature: -40 ℃ ~ 80 ℃

#### Order Info:

PG1302-XX or PG1302-PI-XX

XX : the default frequency band

- 470: For CN470
- 868: For EU868,IN865
- 915: For US915,AU915,AS923,KR920

Note: PG1302-PI include RPi converter board for RPI 3/4.