

IoT LoRa Gateway HAT for Raspberry Pi (868MHz/915MHz)

LoRa (Long Range) is the smart, long-range, wireless transmission technology that is enabling the future of IoT (Internet of Things). It's very low power but is only suitable for very small amounts of data. Making it ideal for sensors such as weather monitoring, air quality etc.

Our IoT LoRa Raspberry Pi HAT allows you to create an inexpensive LoRa gateway, compatible with The Things Network, in conjunction with a Raspberry Pi or other single board computers. The HAT allows you to set up your IoT LoRa gateway in minutes rather than hours for a third of the price of traditional gateways.

The IoT LoRa Gateway HAT utilises the RAKWireless RAK833 mPCIe LoRa gateway concentrator module which is based on Semtech SX1301 LoRa technology and provides a fully LoRaWAN Compliant gateway listening on 8 channels at the same time.

It's available in two different frequency variations:

- 868 MHz
- 915 MHz
- Need more information about frequencies in your region? [Click here.](#)

Features

- Low power consumption
- Fully soldered and assembled. Plug onto your Raspberry Pi, install our software and you're ready to go! No waiting for compiling.
- HAT form factor means that it is more compact to other solutions on the market
- Industrial standard reliability
- Suitable for low power wireless sensor network applications such as irrigation systems, smart metering, smart cities, home automation etc.
- Real time monitoring

What is a LoRa Gateway?

A LoRa Gateway is the piece of hardware in a LoRaWAN Network which is setup to primarily receive packets from LoRa Nodes and bridge them to a LoRaWAN Network such as *The Things Network. These are usually able to receive from hundreds of nodes at the same time and provide LoRaWAN coverage for both your devices and others within range of it. This is most similar to your Wi-Fi Router in a home network.

Pair your IoT LoRa Gateway HAT with one of our LoRa Nodes

We have a variety of LoRa nodes that will work with your LoRa Gateway hat such as our...

- IoT LoRa Node pHAT for Raspberry Pi(868 MHz or 915 MHz)
- IoT micro:bit LoRa Node (868 MHz or 915 MHz)
- IoT LoRa Node Shield for Arduinio(868MHz/915MHz)

Compatible with

- Raspberry Pi A+
- Raspberry Pi B+
- Raspberry Pi 2B

- Raspberry Pi 3B
- Raspberry Pi 3B+
- Raspberry Pi Zero
- Raspberry Pi Zero W
- Plus any other Raspberry Pi with 40 GPIO Pins
- ASUS Tinkerboard
- ASUS Tinkerboard S
- Odroid C2

Installing your LoRa Gateway outside? Try this case...

The industrial design with heavy-duty double hinges and spring-loaded captive screws sees the case a premier solution. Designed to withstand the toughest environments, the outdoor enclosure is a light, yet very solid wireless outdoor enclosure that fits most boards in today's market. Being NEMA-67 rated, it provides complete protection against ingress of dust as well as protection against immersion in water. [View this case.](#)



What's Inside?

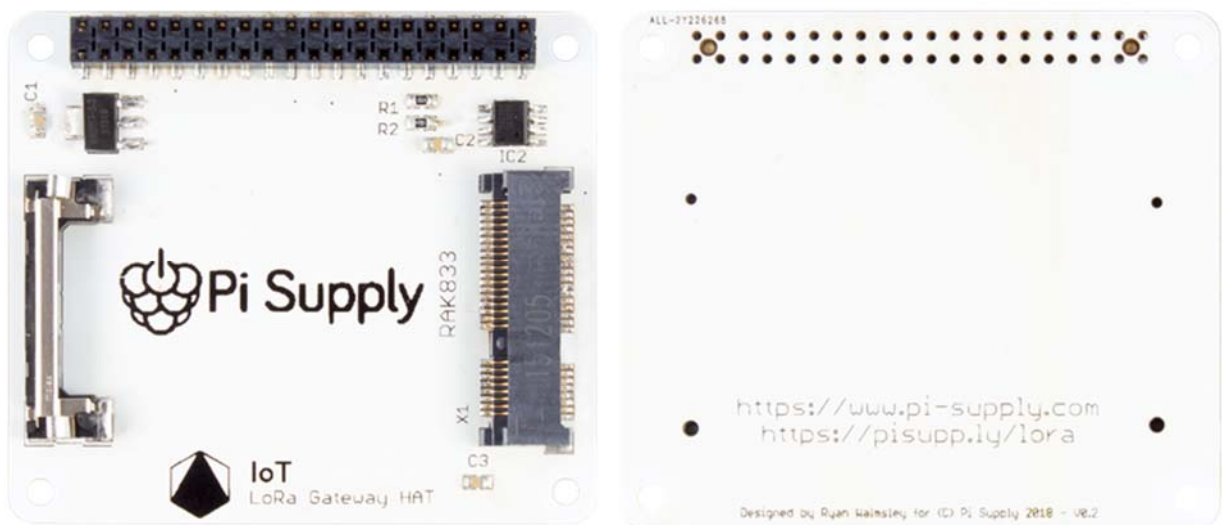
- IoT Gateway HAT board
- RAK833 Pre-assembled
- Mounting Hardware
- Stickers
- Info card

What is The Things Network?

The Things Network Is a rapidly growing LoRaWAN Provider that is increasing coverage constantly throughout the UK and Worldwide, the benefit of using a public network is devices that you build in one area of the UK will work in any area of the UK or even the EU as long as you're within Coverage! Not got coverage? You can setup your own gateway (such as our IoT LoRa Gateway HAT for Raspberry Pi) for you and others to use and increase the coverage at the same time. The Things Network offers a commercial plan but more importantly the free to use community plan as standard.

Setup Guides

- GitHub
- IoT LoRa Gateway – SD Card Image Setup



<https://uk.pi-supply.com/products/iot-lora-gateway-hat-for-raspberry-pi/5-7-19>