



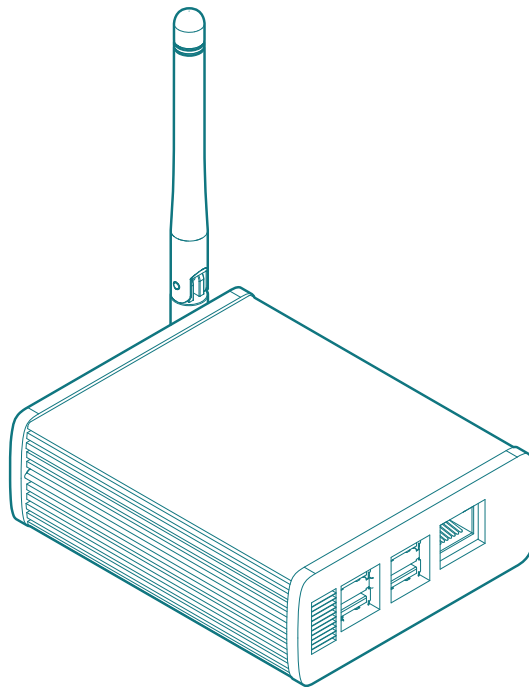
PRO GATEWAY

LoRa<sup>®</sup> CONNECTIVITY

**ARDUINO.CC**

OPEN-SOURCE ELECTRONICS PLATFORM

ARDUINO GATEWAY WITH LORA CONNECTIVITY, IS THE DOOR TO ENTER INTO THE LORA WORLD. DISCOVER THE ENDLESS POSSIBILITIES OF THE GATEWAY AND THE ARDUINO CREATE PLATFORM



The Arduino gateway kit provides LoRa (Long Range) connectivity using ultra-long range and high interference immunity on the 868 MHz radio bands.

The gateway offers up to 8 LoRa Channels in the 868Mhz frequency allowing it to receive up to 8 LoRa packets simultaneously making it the ideal device to use in LoRaWAN gateways applications.

It is designed around the **SX1301 from Semtech**, which enables robust connection between the gateway and a massive amount of wireless end-points spread over a very wide range of distances. It has the Listen Before Talk capability. When enabled, the device monitors channels continuously and transmits only if the channel is free. It's the perfect companion of the **Arduino MKR WAN 1300**. Installation, provisioning and remote management the Gateway are made incredibly simple through the our Arduino Create platform.

This gateway enables people to leverage the LoRa connectivity in many use cases:

## TECH SPECS

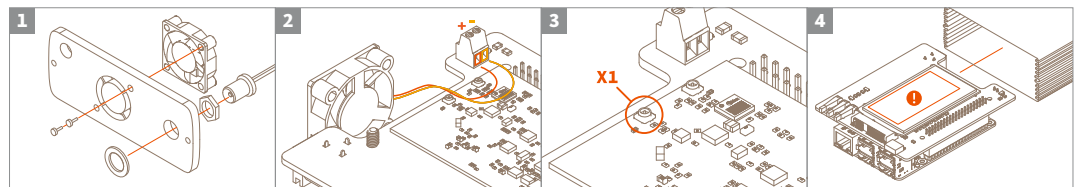
- AUTOMATED METER READING
- ENVIRONMENTAL MONITOR
- SMART CITIES
- HOME AND BUILDING AUTOMATION
- WIRELESS ALARM AND SECURITY SYSTEM
- INDUSTRIAL MONITORING AND CONTROL
- LONG RANGE IRRIGATION SYSTEM
- AGRICULTURAL MONITORING

- LORA GATEWAY CAPE ADAPTER
- CHIPSET SEMTECH SX1301 WITH TWO SX1257
- OPERATING VOLTAGE 5V
- CURRENT CONSUMPTION 815MA (TX@+27DBM); 600MA (RX)
- MODULATION LORA® SPREAD SPECTRUM, FSK, GFSK
- OPERATING FREQUENCY 868MHZ (EU)
- OPERATING TEMPERATURE -40°C TO +85°C
- RF OUTPUT POWER UP TO +27DBM
- SENSITIVITY UP TO -137DBM

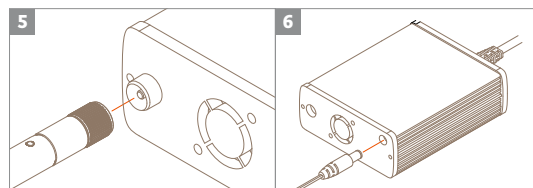
## FEATURES:

- LISTEN BEFORE TALK (LBT) CAPABILITY
- ON-BOARD UFL ANTENNA
- 8 LORA CHANNELS
- FPGA SUPPORTS LORA SPECTRAL SCAN

## ASSEMBLY AND SETUP INSTRUCTIONS:



1. Insert the SD card then attach the fan as shown in the picture then screw together the enclosure panel with the SMA pigtail.
2. Wire the Fan cables with the clips as shown in the image above.
3. Connect the SMA pigtail to the X1 antenna connector.
4. Insert the boards into the enclosure - **Important:** make sure to take note of the code from the sticker on the radio module, before placing it inside the enclosure (you'll need it later).

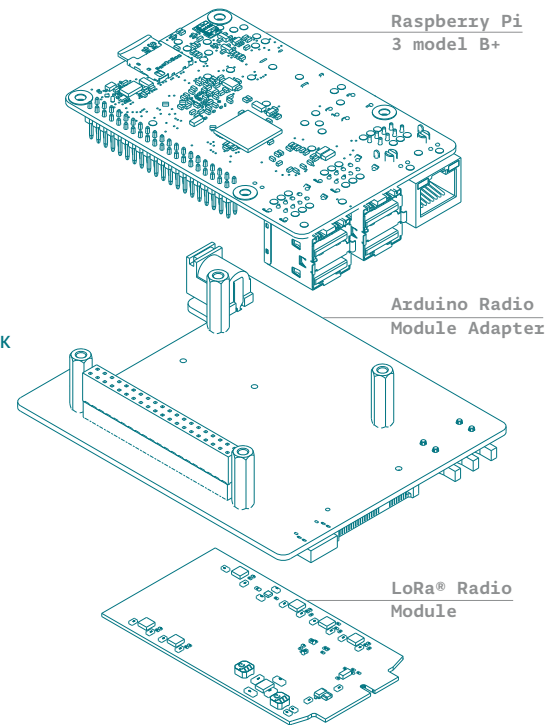


5. Connect the antenna.
  6. Plug-in the power supply and the Ethernet Cable.
7. Visit: [CREATE.ARDUINO.CC/GETTING-STARTED/LORAGW](https://create.arduino.cc/getting-started/loragw)
- Follow the instructions and enter the code you noted in the 4. You're all set! Welcome to the LoRa® world!

For further info, visit:

[STORE.ARDUINO.CC/ARDUINO-PRO-GATEWAY](https://store.arduino.cc/arduino-pro-gateway)

## WHAT'S IN YOUR ARDUINO PRO GATEWAY?



## KIT BOX INCLUDES

- 1 Aluminium Enclosure
- 1 Raspberry Pi 3 model B+
- 1 Arduino Radio Module Adapter
- 1 LoRa® Radio module
- 1 Fan
- 1 Ethernet cable
- 1 AC power adapter (with multi plug)
- 1 Micro UFL to SMA Pigtail
- 1 SMA Antenna
- 1 MicroSD card

