



Pi Supply



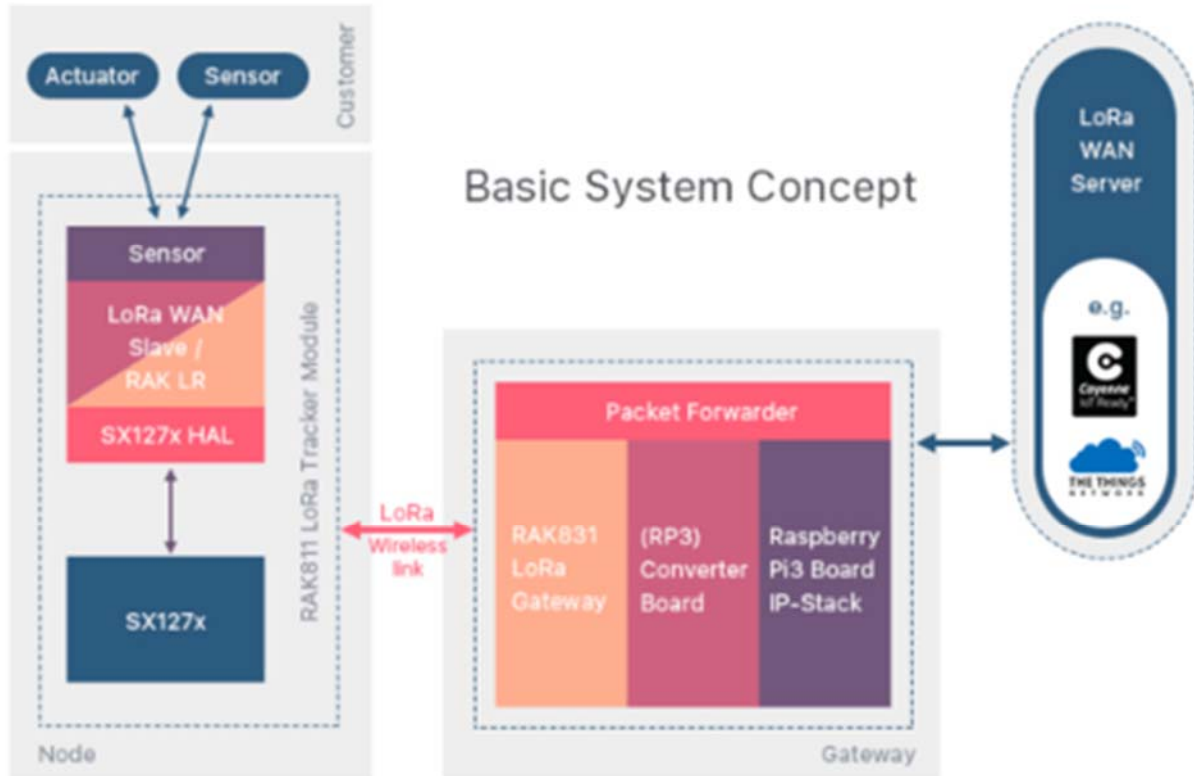
RAK831 Pilot Gateway Professional Demonstration Setup

The RAK831 Pilot Gateway is a device that consists of a Raspberry Pi 3, a RAK831 LoRa Concentrator, converter board with GPS module and a heat sink on top of the RAK831 module . Built with an aluminium housing, the can be used as a ready to use LoRaWAN Gateway that can be connected to a LoRaWAN server.

The RAK831 Pilot Gateway is meant to be used as a demonstration system for the LoRaWAN network system. It is not designed to be a fully featured outdoor gateway.

Please operate the Lite gateway only indoors and in combination with the delivered power supply and antenna.

Basic system concept for the LoRaWAN system



The RAK831 Pilot Gateway is the central hardware solution for all LoRa based radio communication. It receives and transmits radio messages. Processing of the radio messages as well as the protocol related tasks is done by the embedded host system (Raspberry Pi). Received and processed radio messages are being sent to a LoRaWAN server. The concrete segmentation of the protocol related tasks is outside the scope of this document.

The pre-installed github repositories are:

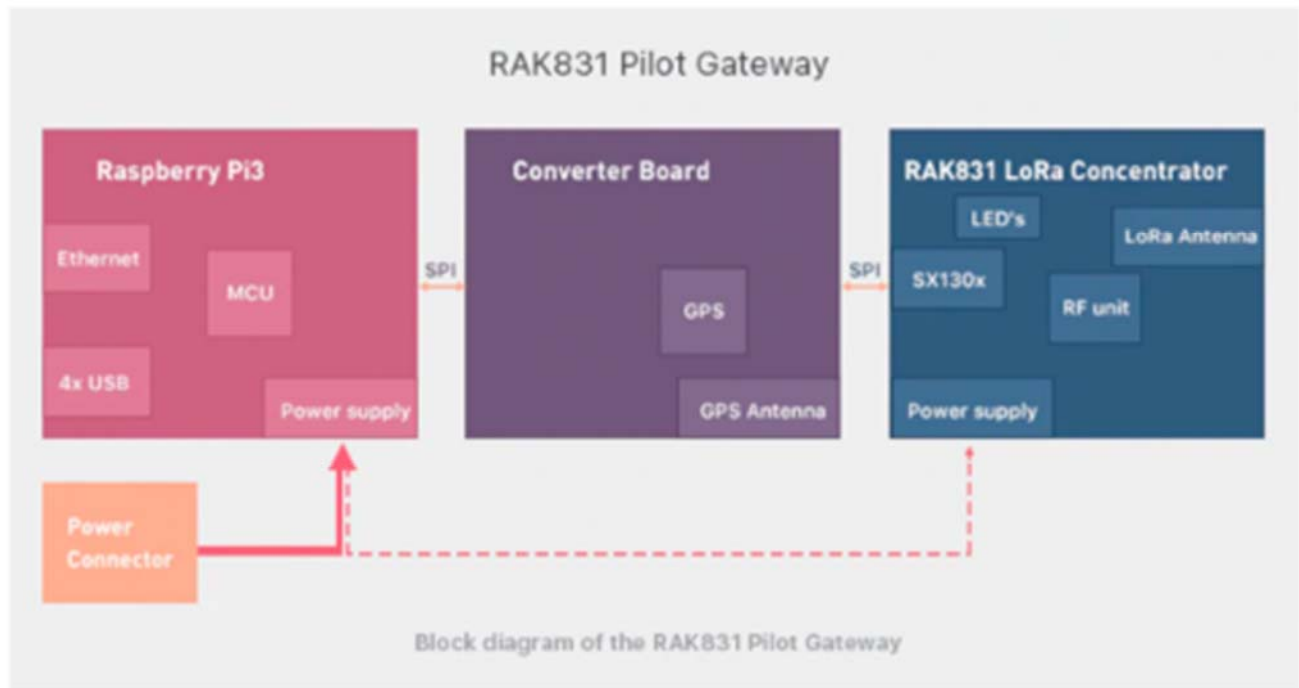
- "lora_gateway"
- "packet_forwarder"

Both repositories have been installed on the folder /home/pi/github.

Hardware

The RAK831 Pilot Gateway consists of a Raspberry Pi 3, a RAK831 LoRa Concentrator and a converter board with GPS for routing the signals between the Raspberry Pi and the RAK831.

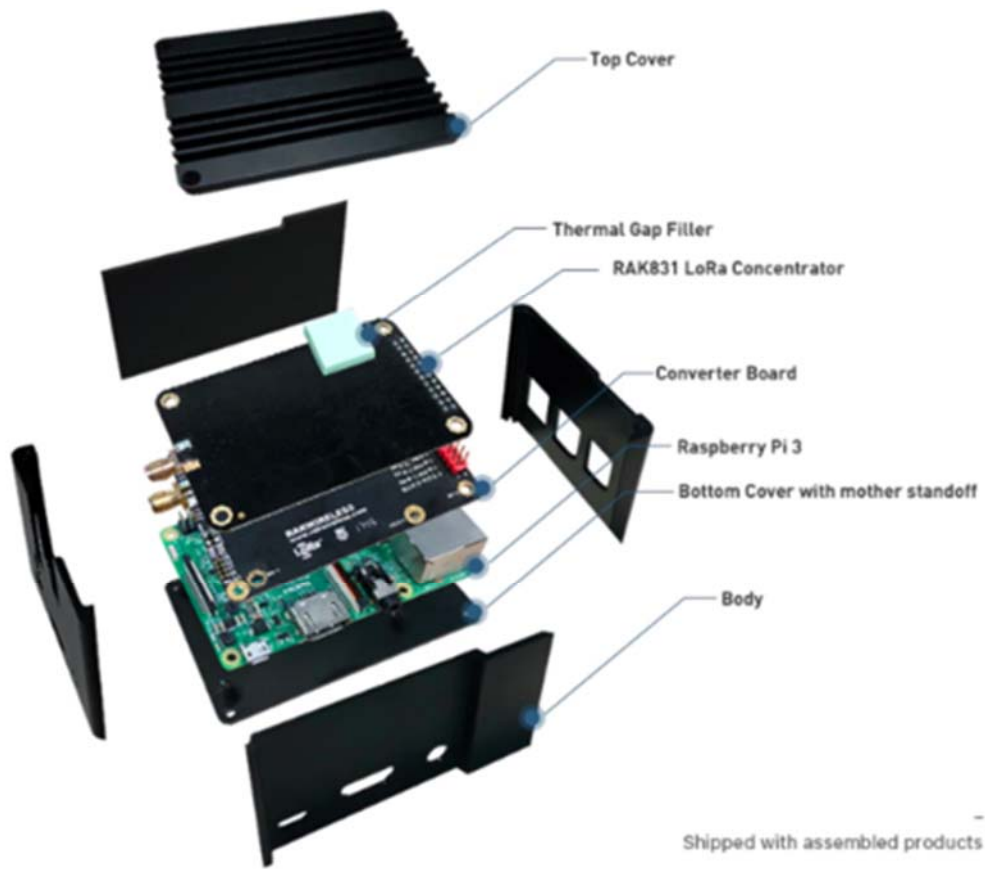
More information on the RAK831 can be found [here](#)



Comes with

- RAK831 Pilot Gateway and LoRa Antenna
- Raspberry Pi 3
- DC-5v Power Supply x 1
- GPS Antenna x 1
- DC(5.5 x 2.1) to Micro USB x 1

Kit



<https://uk.pi-supply.com/products/rak831-pilot-gateway-professional-demonstration-setup> 9-17-18