RAK7248 WisGate Developer D4H

Thank you for choosing **RAK7248 WisGate Developer D4H** in your awesome IoT Project! 🎉 To help you get started, we have provided you all the necessary documentation for your product.

- Supported LoRa Network Servers
- AWS Greengrass V2
- Datasheet
- WisGate Developer Gateway Firmware Setup
- RAK7248 Latest Firmware

Product Background

The RAK7248 WisGate Developer D4H RAK7248 is a LoRaWAN® Gateway that consists of Raspberry Pi4, RAK2287 Concentrator, and RAK2287 Pi HAT. RAK2287 includes a GPS module and a heat sink for better performance and thermal heat dissipation management, and its housing is built with an aluminum casing.

For the build-in RAK2287, it uses the **SX1302 chip** from Semtech which built-in LoRa® concentrator IP core is a powerful digital signal processing engine. It can receive up to **8 LoRa packets** with different spreading factors on different channels and available in multiple variants so it can be used for international standard bands. This unique capability allows implementing innovative network architectures advantageous over other short-range systems. RAK2287 Pi HAT is a converter board with Raspberry Pi form factor that enables the RAK2287 module to be mounted on the top of the Raspberry Pi. It integrates one (1) 40-pin female Pi HAT connector and one mPCIe connector to connect RAK2287 to the Raspberry Pi 4.

RAK7248 is ideal for prototyping, proof-of-concept demonstration, or evaluation. It includes a ready to use LoRaWAN Gateway OS that can be connected to a LoRaWAN server. Also, it is developer-friendly and simple even for no-so-tech users to set up a LoRaWAN system. It has to be the best value and function for connectivity to address a variety of applications like Smart Grid, Intelligent Farm, and other IoT enterprise applications.

Product Features

- Computing with Raspberry Pi4 (Linux).
- Based on the LoRa Concentrator Engine: Semtech® SX1302.
- Built-in Ublox ZOE-M8Q GPS Module.
- Built-in Heat Sink for thermal heat dissipation management.
- Supports 5V/3A power supply.
- IP30 housing.
- TX power up to 27dBm, RX sensitivity down to -139 dBm @SF12, BW 125 KHz.
- LoRa® Frequency band support: RU864, IN865, EU868, US915, AU915, KR920, AS923.
- Includes Pi ready 'ID EEPROM', GPIO setup, and device tree can be automatically configured from vendor information.
- Supports a fully open source LoRaWAN server.

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