

RAK3172-SiP WisDuo LPWAN SiP AT Command Manual

Overview

The RAK3172-SiP, based on the STM32WLE5 chip, simplifies LoRaWAN and LoRa point-to-point (P2P) communication. To integrate LoRa technology into your projects, the RAK3172-SiP uses an easy-to-use UART communication interface for sending AT commands. These AT commands set parameters for LoRa P2P and LoRaWAN communication. Any microcontroller with a UART interface can control the RAK3172-SiP.

The UART serial communication is exposed on the UART2 (also identified as **LPUART1 port**), through **Pin 29 (TX2)** and **Pin 30 (RX2)**. The default parameters of the UART2 communication are **115200 / 8-N-1**. Firmware upgrades are also possible through this port. To familiarize yourself with the pin distribution of this module and find a schematic circuit of a reference application, refer to the [RAK3172-SiP Datasheet](#).

WARNING

The RAK3172-SiP does not have pre-flashed LoRaWAN credentials. In this case, you have to define and setup your own unique credentials for the SiP's.

RUI3 AT Command List

The RAK3172-SiP default firmware is based on [RUI3 \(RAKwireless Unified Interface V3\)](#). You can access the AT command via UART2 by default.

The complete list of commands can be found in [RUI3 AT Commands Documentation](#).

NOTE

In addition, aside on UART2, AT commands can also be interfaced via UART1 **Pin 17 (TX1)** and **Pin 18 (RX1)**. You can configure the settings of UART1 and UART2 interfaces via [RUI3 Serial Operating Modes](#).