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Wio Terminal LoRaWAN Field Tester Kit: Plug and Play LongFi Network Monitor for Helium Network

Plug-and-play Wio Terminal LoRaWAN Field Tester Kit for monitoring LongFi/Helium network coverage, verifying gateways and hotspots, mapping, tracking, and multi-zone deployment support.

SKU	UPDATED	PRICE
114992777	2026-10-09 07:39:37	$109.00(Excl. VAT)



Overview



The Wio Terminal LoRaWAN Field Tester Kit is a plug-and-play LongFi network monitor for the Helium Network, designed for on-site verification of coverage, identification of gateways/hotspots, and finding optimal deployment locations. It features a compact Type C form factor, a friendly display for real-time network and GPS information, and supports long-life operation for 3–5 years, along with mapper, tracker, multi-zone, and developer-friendly capabilities.

Key Features

- **On-Size Verification:** Monitor the LongFi network performance from the field to verify the coverage and know the different Gateways / Hotspots covering a given place.
- **The Best Tracker:** Find the best places to deploy new Gateways / Hotspots.
- **Type C Port:** Compact size, support Type C power bank charge to bring the device everywhere.
- **Easy to operate & Long Life:** Ready to go Wio Terminal LoRaWAN Field Tester. No setup, just power it on! The included communication allows normal use for 3 to 5 years.
- **Friendly Interface Display:** Directly display network and GPS information on the Wio Terminal screen

Product Gallery









Specification

Main Chip	Manufacturer Part Number	ATSAMD51P19
	Core Processor	ARM® Cortex®-M4F running at 120MHz
	Memory	4 MB External Flash, 192 KB RAM
	Maximum Speed	200MHz
	External Flash	4MBytes
	Operating Temperature	-40°C ~ 85°C (TA)
LCD Screen	Resolution	320x240
	Display Size	2.4inch
	Drive IC	ILI9341
Wireless Connectivity	Manufacturer Part Number	RTL8720DN
	KM4 CPU	ARM® Cortex®-M4F @ 200MHz
	KM0 CPU	ARM® Cortex®-M0
	Wi-Fi	802.11 a/b/g/n 1x1, Dual Band 2.4GHz & 5GHz
	Bluetooth	Support BLE5.0
Built-in Modules	Accelerometer	LIS3DHTR
	Microphone	1.0V-10V -42dB
	Speaker	≥78dB @10cm 4000Hz
	Light Sensor	400-1050nm
	Infrared Emitter	940nm
Interface	MicroSD Card Slot	Maximum 16GB
	GPIO	40-PIN (Raspberry Pi Compatible)
	Supported Protocol	SPI, I2C, I2S, ADC, DAC, PWM, UART(Serial)
	Grove	2 (Multifunction), for Digital, Analog, I2C, and PWM
	FPC	20-Pins
	USB Type-C	Power & USB-OTG
Operation Interface	5-Way Switch	
	Power/Reset Switch	
	User-defined button *3	
Enclosure	Mouting	Built-in magnets and two mounting holes
	Dimension	72mm*57mm*12mm
	Materials	ABS+PC
Software Support	Arduino	
	MicroPython	
	ArduPy	
	AT Firmware	
	Visual Studio Code	
	CircuitPython (How to run CircuitPython on Wio Terminal?)	

Parameters	Specifications
Voltage - supply	3V3

LoRa-E5	Frequency	EU868 / US915 / AU915 / AS923 / KR920 / IN865
	Protocol	LoRaWAN
	Sensitivity	-116.5dBm ~ -136dBm
	modulation	LoRa, (G)FSK, (G)MSK, BPSK
Quectel L76-LB	Receiving Bands	GPS L1/Galileo E1 C/A: 1575.42MHz GLONASS L1 C/A: 1602.5625MHz BeiDou B1 C/A: 1561.098MHz
	Channel	33 Tracking Channels 99 Acquisition Channels 210 PRN Channels
	Sensitivity	Acquisition: -148dBm Tracking: -165dBm Reacquisition: -160dBm
Interfaces	Wio Terminal 40-PIN(2x20 Male Headers)	
Enclosure	Dimension	72mm*57mm*12mm
	Materials	3D Printing with ABS

Applications

- **Field Tester:** it allows to monitor the LoRaWan / LongFi network performance from the field. That way you can verify the coverage and know the different Gateways / Hotspots covering a given place. It helps to find the best places to deploy new Gateways / Hotspots, compare different places to optimize the network deployment. It can show signal strength in real-time and allows the testing of different network parameters.
- **Mapper:** it automatically transfers the positions to the network mappers - Helium Mappers (https://mappers.helium.com/) and Coverage Map (https://coveragemap.net/) - to create a map of coverage. This map is really important to understand where it is possible to use the network. It is a key point for giving trust to the network and motivating the service providers to use it.
- **Tracker:** it can be connected to tracking services like cargo (https://cargo.helium.com/) to track cars, people, assets in real-time.
- **Multi-zone:** suports EU868, AS923, US915, KR920, IN865, AU915
- **Friendly to developers:** compatible with over 300 Plug&Play Grove modules to create IoT nodes. The firmware is open-source and can be upgraded like moving a file to a directory.

Part List

- 1x Wio Terminal
- 1x USB Type-C Short Cable
- 1x Wio Terminal Chassis - LoRa-E5 and GNSS *1
- 1x Antenna(EU868/US915) *1

Compliance & Logistics



HSCODE	9031809090
USHSCODE	9031808085
UPC	
EUHSCODE	8517180000
COO	CHINA

Resource Links

- https://www.seeedstudio.com/WioField-Tester-Kit-p-5282.html

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