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INDUSTRIAL PRODUCT DATASHEET

Wio-WM1110 Dev Kit, built-in Semtech LR1110 and Nordic nRF52840

A development kit based on the Wio-WM1110 Wireless Module with Semtech LoRa® and Nordic nRF52840, offering low-power, long-range communication, GNSS/Wi-Fi geolocation, and Grove-compatible expansion.

SKU	UPDATED	PRICE
114993082	2026-10-22 05:51:29	$32.90(Excl. VAT)



Overview



The Wio-WM1110 Dev Kit is based on the Wio-WM1110 Wireless Module and integrates Semtech's LoRa® transceiver and a multi-purpose radio front-end for geolocation, offering low-power, high-sensitivity network coverage with GNSS (GPS/BeiDou) and Wi-Fi scanning. It provides a complete solution for developers creating low-power, long-range IoT applications with precise location tracking, featuring rich GPIOs compatible with over 400 Grove modules, built-in temperature/humidity and 3-axis accelerometer sensors, and support for solar or battery power.

Key Features

The WM1110 development kit is based on **Wio-WM1110 Wireless Module** and integrates Semtech's LoRa® transceiver and a multi-purpose radio front-end for geolocation.

The LoRa® transceiver provides low-power, high-sensitivity network coverage, while GNSS (GPS/Beidou) and Wi-Fi scanning offer all-around location coverage.

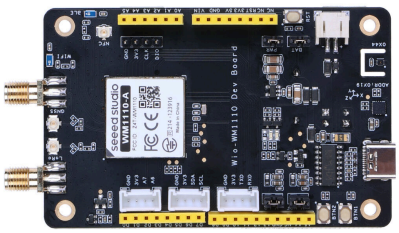
SenseCAP WM1110 Dev Kit provides a complete solution for developers looking to create IoT applications that require low-power, long-range communication, and precise location tracking capabilities, while also providing connectivity options for a variety of peripherals.

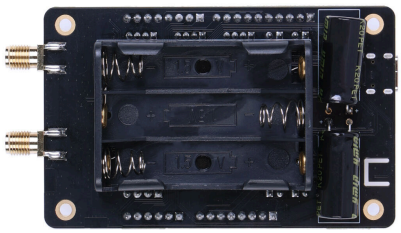
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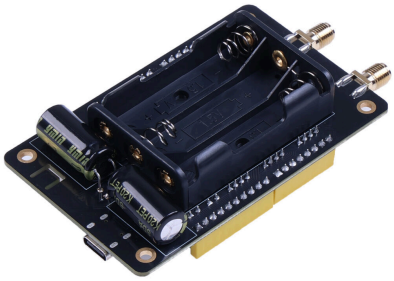
- Wio-WM1110 module has been perfectly applied to **SenseCAP T1000**, SenseCAP T1000 is a LoRaWAN® card size tracker for seamless indoor & outdoor positioning. It boasts months of battery life and is equipped with temperature, light, and motion sensors, making it ideal for a variety of location-based applications.

- **Low-Power High-Sensitivity LoRa/(G)FSK Half-Duplex RF Transceiver**: Frequency bands support in the range 863- 928MHz
- **Multi-Purpose Radio Front-End for Geolocation**: GNSS (GPS/ BeiDou)、Wi-Fi、Bluetooth
- **Rich GPIOs and Compatible with Grove:** Over 400 Grove-compatible for flexible expansion options.
- **Open Source Platform:** Leverage the extensive LR1110 and nRF52840 open-source ecosystem for infinite application possibilities.
- **Built-in Sensors and Multiple Power Supply Modes:** Temp&Humidity sensor and 3-Axis accelerometer, support both solar power and battery-powered.

Product Gallery











Specification

LoRa®WAN Protocol	V1.0.4
Frequency	863~928MHz

Sensitivity	-125dBm @125K/SF7 -141dBm @125K/SF12
Output Power	20dBm max @LoRa®
Positioning Technology	GNSS(GPS,BeiDou),WiFi
Range	2~10km (Depends on antenna and environment)

Bluetooth	Bluetooth 5.3
Flash	1MB
RAM	256KB
Protocol	Bluetooth LE, Bluetooth mesh, Thread, Zigbee, 802.15.4, ANT and 2.4 GHz proprietary stacks
Output Power	6dBm max @Bluetooth

TH Sensor (SHT41)		
	Range	Accuracy
Temperature	-40~125°C	0.2°C
Humidity	0~100%RH	1.8%RH

3-Axis Accelerometer(LIS3DHTR)	
Range	±2g, 4g, 8g, 16g
Bandwidth	0.5Hz ~ 625Hz
Sensitivity (LSB/g)	1000 (±2g) ~ 83 (±16g)

Voltage - supply	3.3V (USB 2.0 Type-C)	
	Solar Panel(optional)	0.5W/100mA The power supply will charge the ultracapacitor.
	Battery(optional)	AAA Battery x3 4.5V, each battery is 1.5V
Interface	RFIO	Bluetooth Antenna x1 WiFi Antenna x1 GNSS Antenna Connector x1 LoRa Antenna Connector x1 NFC Antenna IPEX x1
	USB type-C	x1
	Grove Interface	GPIO(A6/A7) x1 I2C x1 UART x1
	GPIO	Arduino Compatible Connectors
Button	BTN1	Configurable button
	BTN2	Configurable button
	RST	Reset

Part List

Wio-WM1110 Dev Board	x1
LoRa Antenna(868~915MHz)	x1
GPS Antenna	x1
Solar Panel(55*70mm/0.5W)	x1

Compliance & Logistics

HSCODE	8517180050
USHSCODE	8517180050
UPC	
EUHSCODE	8543709099
COO	CHINA

Resource Links

- https://www.seeedstudio.com/Wio-WM1110-Dev-Kit-p-5677.html
- Wio-WM1110 Dev Kit V1.2_SCH.pdf
- Wio-WM1110_Module_Datasheet_V1.3
- LR1110 Datasheet
- Nordic nRF52840 Datasheet
- Wio-WM1110 Dev Kit Cadence Design File

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