

INDUSTRIAL PRODUCT DATASHEET

Wio-WM1302 Long Range Gateway Module(SPI) - EU868

A high-performance, certified LoRaWAN gateway module in mini-PCIe form factor for LPWAN gateway devices and long-range wireless communication development.

SKU

114992549

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PRICE

\$25.00(Excl. VAT)



Overview



Static Cling Bag
Package(1pcs)

The Wio-WM1302 Long Range Gateway Module (SPI) - EU868 is a mini-PCIe form factor LoRaWAN gateway module powered by the Semtech SX1302 chip, offering high sensitivity down to -139 dBm @SF12 and TX power up to 26 dBm @3.3V. It is certified with CE (EU868), FCC ID (US915), and TELEC (AS923), simplifying gateway device development for LPWAN applications.

Key Features

- **Powered by Semtech® SX1302 baseband LoRa® chip**, extremely low power consumption and high performance.
- **Mini-PCle form factor with the standard 52-pin golden finger**, easy to integrate with various gateway devices.
- **Ultra-low operating temperature**, no additional heat dissipation needed, reducing the size of LoRaWAN gateway.
- **High sensitivity** down to -139 dBm @SF12 with SX1250 TX/RX front-end; TX power up to 26 dBm @3.3V.
- **Certified with CE(EU868), FCC ID(US915), and TELEC(AS923)**. Simplify the final product certification process.

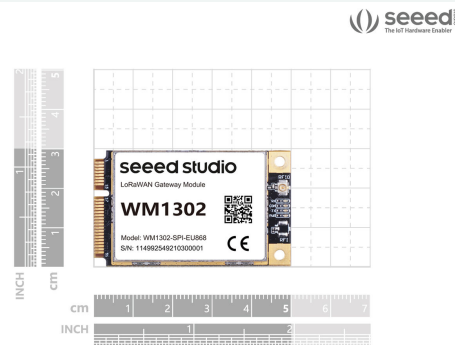
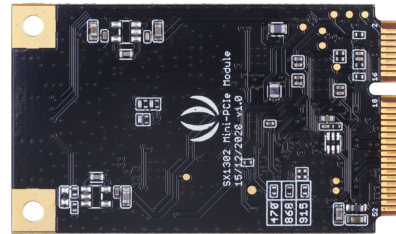
WM1302 module is a new generation of LoRaWAN gateway module with mini-PCle form-factor. Based on the Semtech® SX1302 baseband LoRaWAN® chip, WM1302 unlocks the greater potential capacity of long-range wireless transmission for gateway products. It features higher sensitivity, less power consumption, and lower operating temperature than the previous SX1301 and SX1308 LoRa® chips.

WM1302 LoRaWAN gateway module has SPI and USB versions on both US915 and EU868 frequency bands, enabling you to have a wide-range of LoRaWAN frequency plans options to choose including EU868, US915, AS923, AS920, AU915, KR920, and IN865.

The WM1302 module has passed various certifications such as CE (EU868), FCC ID (US915), TELEC (AS923). These help to simplify the development and certification process of long range gateway devices.

WM1302 is designed for M2M and IoT applications and can be widely applied in LPWAN gateway supported scenarios. It would be a perfect choice for you to significantly reduce the technical difficulties and time-consumption when developing the LoRa gateway devices, including LoRaWAN gateway, etc.

Product Gallery



Specification

Region	EU868	US915
Frequency	863-870MHz	902-928MHz
Sensitivity	-125dBm @125K/SF7 -139dBm @125K/SF12	-125dBm @125K/SF7 -139dBm @125K/SF12
TX Power	26 dBm (with 3.3V power supply)	25 dBm (with 3.3V power supply)
LEDs	Power: Green Config: Red TX: Green RX: Blue	
Form Factor	Mini PCIe, 52pin Golden Finger	
Power Consumption (SPI version)	Standby: 7.5 mA TX maximum power: 415 mA RX: 40 mA	
Power Consumption (USB version)	Standby: 20 mA TX maximum power: 425 mA RX: 53 mA	
LBT(Listen Before Talk)	Support	
Antenna Connector	U.FL	
Operating Temperature	-40°C to 85°C	
Dimensions	30 mm (width) × 50.95 mm (length)	

Region	EU868	US915
Certification	CE (EU868), FCC ID (US915), TELEC (AS923)	

Applications

- LPWAN Gateway devices development
- Any long-distance wireless communication application development
- LoRa and LoRaWAN application learn and research

Compliance & Logistics



HSCODE	8517709000
USHSCODE	8517620090
UPC	
EUHSCODE	8517180000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/WM1302-LoRaWAN-Gateway-Module-SPI-EU868-p-4889.html>
- [Semtech SX1302 datasheet](#)
- [WM1302\(SPI\) CE Certificate](#)

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