

INDUSTRIAL PRODUCT DATASHEET

Wio-WM1302 LoRaWAN Gateway Module (SPI) - US915 - M

Wio-WM1302 LoRaWAN Gateway Module (SPI) - US915 is a CE/FCC-certified mini-PCIe LoRaWAN gateway module based on Semtech® SX1302 with high sensitivity and low power consumption.

SKU

114992969

UPDATED

2026-08-24 03:38:20

PRICE

\$25.00(Excl. VAT)



Overview



The Wio-WM1302 LoRaWAN Gateway Module (SPI) - US915 is a mini-PCIe form factor module based on Semtech® SX1302, delivering extremely low power consumption, high sensitivity down to -139 dBm @SF12, and TX power up to 26 dBm @3.3V. It is CE and FCC certified and designed for M2M and IoT applications, including LPWAN gateway devices and long-range wireless communication development.

Key Features

Note:

- **114992550** is the old WM1302 SPI-US915 version and has reached EOL. **114992967** and **114992969** are the same new WM1302 SPI-US915 version from different production batches. Please feel free to choose either one if you need the SPI-US915 version. All US915 WM1302 modules are FCC certified.

The wio-WM1302 module is a new generation of LoRaWAN gateway module in mini-PCIe form-factor based on Semtech® SX1302. It features extremely low power consumption and outstanding performance.

- **Powered by Semtech® SX1302 baseband LoRa® chip**, extremely low power consumption and high performance.
- **Mini-PCIe 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 the 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, FCC**. Simplify the final product certification process.

The wio-WM1302 module is a new generation of LoRaWAN gateway module with a mini-PCIe form factor. Based on the Semtech® SX1302 baseband LoRaWAN® chip, Wio-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 compared with the previous SX1301 and SX1308 LoRa® chips.

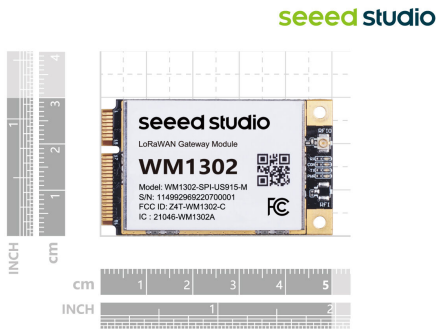
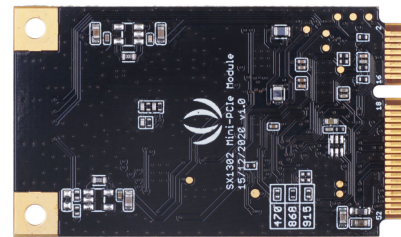
The wio-WM1302 module is CE, and FCC-certified, which helps simplify the development and certification process of the LoRaWAN gateway devices.

Wio-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 the LoRaWAN gateway, etc.

Note:

- We have released a new version of RF Explorer fiberglass, please visit [Fiberglass Antenna Kit; 863-870MHz; 8dBi; 1300mm](#)

Product Gallery

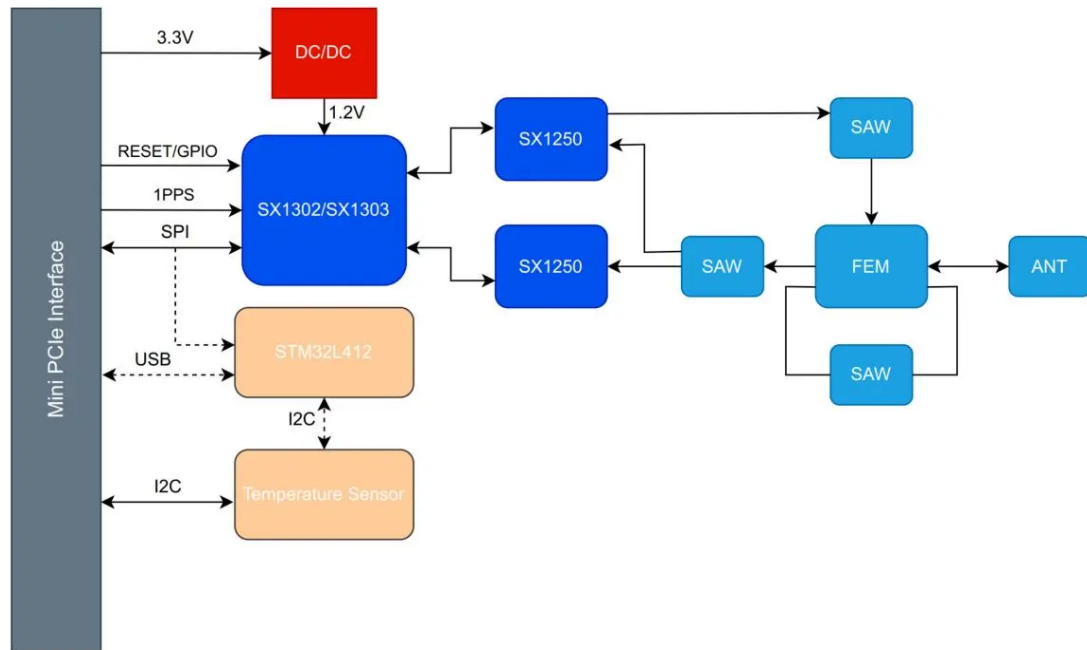


Specification

Region	WM1302 (EU868)	WM1302 (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)	

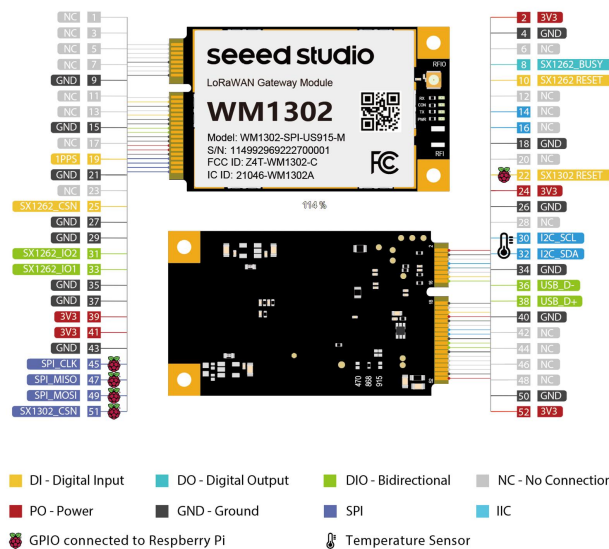
Region	WM1302 (EU868)	WM1302 (US915)
Certification	CE, FCC	

Hardware Overview



seeed studio

WM1302 LoRaWAN Gateway Module (SPI / USB)



Applications

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

Compliance & Logistics



HSCODE	8517799000
USHSCODE	8517620090
UPC	
EUHSCODE	8517180000
COO	CHINA

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

15.21

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy.

If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Resource Links

- <https://www.seeedstudio.com/WM1302-LoRaWAN-Gateway-Module-SPI-US915-SKY66420-p-5455.html>
- [Pinout Detail](#)

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com