

WIFI+BT Module

MWB1830-WB01

PRODUCTS USERMANUAL

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Product Description

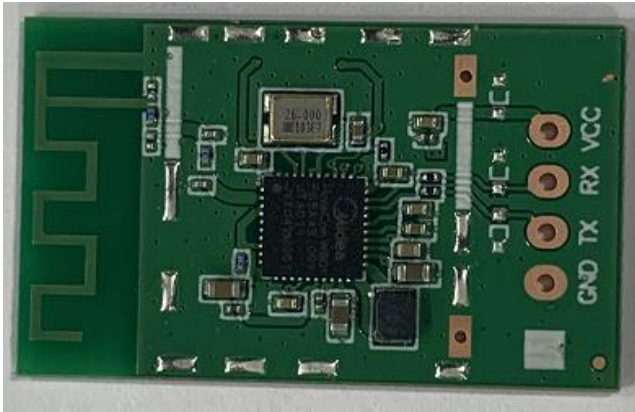
The MWB1830-WB01 is a high-gain and low power consumption wifi module . It fully complies with IEEE 802.11b/g/n feature rich wireless connectivity at high standards, delivers reliable, cost-effective, throughput from an extended distance. When 5V, UART and GND were connected, This module is working. The Bluetooth part supports latest 5.1LE operation.

Product Specification

Product Features

- ◆ Complies with IEEE 802.11g; 802.11b; 802.11n; standard for 2.4GHz Wireless LAN.
- ◆ ONE Transmit and ONE Receive path(1T1R)
- ◆ Supports Ad-Hoc/Infrastructure modes
- ◆ Works with all existing network frastructure.
- ◆ Capable of up to 128-Bit WEP Encryption.
- ◆ Freedom to roam while staying connected.
- ◆ UP to 75.5Mbps High-Speed Transfer Rate in 802.11N mode of operation.
- ◆ Operating Systems: Linux
- ◆ Low power consumption.
- ◆ Complies with UART base specification revision 1.1 for WLAN
- ◆ Easy to install and configure.
- ◆ Bluetooth v5.1 Low Energy(LE);

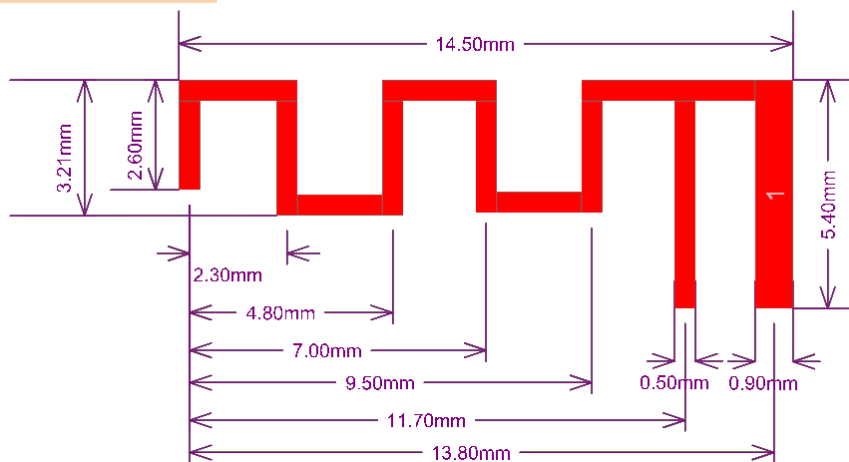
| | |
|-----------------------|---|
| Model | MWB1830-WB01 |
| Product Name | WiFi+BT Module |
| Standard | 802.11a/b/g/n |
| Interface | WiFi: UART BT: UART |
| Data Transfer Rate | 1,2,5.5,6,11,12,18,22,24,30,36,48,54,60,90 and maximum of 75.5Mbps |
| Modulation Method | QPSK,BPSK ,CCK(802.11b) QPSK,BPSK,16QAM ,64QAM with OFDM (802.11g) BPSK,QPSK,16QAM ,64QAM with OFDM (802.11n) GFSK(BT) |
| Frequency Band | 2.4GHz: CH 1~CH11 for FCC |
| Transmit Power | < 20dBm |
| Operation Mode | Ad hoc, Infrastructure |
| Operation Range | Up to 150 meters in open space |
| OS Support | AliOS |
| Security | WEP, TKIP, AES, WPA, WPA2 |
| Operating Voltage | 5V±10% |
| Operating Temperature | -40 ~ 85°C ambient temperature |
| Storage Temperature | -40 ~ 125°C ambient temperature |
| Humidity | 5 to 95 % maximum (non-condensing) |



Pin Definitions

| Pin Name | Functional Description |
|----------|---|
| GND | GND |
| TX | UART-TX, receive end in UART download |
| RX | UART-RX, transmit end in UART download, floating or pull up |
| 5V | 5V power supply |

PCB Antenna specifications



Antennas:

| |
|------------------------|
| 2.4G |
| PCB antenna & 2.42 dBi |

The antenna is permanently attached, can't be replaced.

NOTICE:

- ◆ please keep this product and accessories attached to the places which children can't touch;
- ◆ do not splash water or other liquid onto this product, otherwise it may cause damage;
- ◆ do not put this product near the heat source or direct sunlight, otherwise it may cause deformation or malfunction;
- ◆ please keep this product away from flammable or naked flame;
- ◆ please do not repair this product by yourself. Only qualified personnel can be repaired.

FCC Statement

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.

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

Please notice that if the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains FCC ID: VG8MWBWB01" any similar wording that expresses the same meaning may be used.

The modular can be installed or integrated in mobile or fix devices only. This modular cannot be installed in any portable device, for example, USB dongle like transmitters is forbidden.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter and must be installed to provide a separation distance of at least 20cm from all persons.

A separate approval is required for all other operating configurations, including portable configurations with respect to Part 2.1093 and difference antenna configurations.

There is requirement that the grantee provide guidance to the host manufacturer for compliance with Part 15B requirements.

The end user manual shall include all required regulatory information/warning as shown in this manual, include:

This product must be installed and operated with a minimum distance of 20 cm between the radiator and user body.

The module complies with FCC Part 15.247 /RSS-247 and apply for Single module approval.

Canada Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage;
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device has been tested and compliance with SAR limits, users can obtain Canadian information on RF exposure and compliance.

Après examen de ce matériel aux conformités aux limites DAS et/ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et la conformité and compliance d'acquérir les informations correspondantes.

Please notice that if the ISED certification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains IC: 21015-MWBWB01" any similar wording that expresses the same meaning may be used.

L'appareil hôte doit porter une étiquette donnant le numéro de certification du module d'Industrie Canada, précédé des mots « Contient un module d'émission », du mot « IC: 21015-MWBWB01 » ou d'une formulation similaire exprimant le même sens, comme suit

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter and must be installed to provide a separation distance of at least 20cm from all persons

Cet émetteur ne doit pas être situé en même temps ou fonctionner en liaison avec une autre antenne ou un autre émetteur et doit être installé de manière à assurer une distance de séparation d'au moins 20cm de toutes les personnes

The modular can be installed or integrated in mobile or fix devices only. This modular cannot be installed in any portable device, for example, USB dongle like transmitters is forbidden.

When the module is installed inside another device, the user manual of this device must contain below warning statements;

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licenceexempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage;
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.