

The user manual of WIFI、BLE module

1. The product description

The user can achieve wireless connection to WIFI net and BLE, through this module

2. Basic parameters

Feature Description	Feature Description
Model	MHCWB8S-B&MHCWB8S-IB
Product Name	2.4GHz WIFI+Bluetooth Dual-Mode Module
Major Chipset	BL616C
WLAN Standard	IEEE 802.11b/g/n/ax
BT Standard	V5.0 BLE
WLAN Frequency Range	2.4GHz~2.4835GHz
BT Frequency Range	2402MHz~2480MHz
Spread Spectrum	IEEE 802.11b: DSSS (Direct Sequence Spread Spectrum) IEEE802.11g/n: OFDM (Orthogonal Frequency Division Multiplexing) IEEE802.11ax: OFDMA(orthogonal frequency-division multiple access)
Modulation Method	DBPSK/DQPSK/CCK(DSSS); BPSK/QPSK/16QAM/64QAM/256QAM(OFDM)
Data Transfer Rate	11b:1,2,5.5, 11Mbps 11g: 6,9,12,18,24,36,48,54Mbps 11n:HT20MCS0~HT20MCS7 11ax:HT20MCS0~HT20MCS9
Antenna Reference	MHCWB8S-B:WIFI/BLE Internal Printed ANT; MHCWB8S-IB:WIFI/BLE external ANT
Interface	UART
Supply Voltage	3.3V±0.3V
Dimension	MHCWB8S-B:12 (mm) *16.2 (mm) *2.5 (mm) MHCWB8S-IB: 12 (mm) *13.5 (mm) *2.5 (mm)
Operating Temperature	-40° C to 85° C
Storage Temperature	-40° C to 85° C

3. RF Output Power

	Band	Power Limited
WLAN	2400-2483.5MHz	≤20dBm
BLE	2402-2480MHz	≤20dBm

4. The display method of Model approved code

In the factory, the model approve code is lasered on the shielding case.

5. FCC Statement

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 and if not installed and used in accordance with the instructions 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.

FCC ID:**6. Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of FCC RF Rules. This equipment should be installed and operated with minimum distance of 20 in (50cm) between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter

CAUTION:

To comply with the limits of the Class B digital device pursuant to Part 15 of the FCC Rules, this device is compliant with Class B limits. All peripherals must be shielded and grounded. Operation with non-certified peripherals or non-shielded cables may result in interference to radio or reception

MODIFICATION

To assure continued compliance, Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

6. Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 50 cm (8 in) between the radiator and your body NOTE To satisfy FCC exterior labeling requirements, the following text must be placed on the exterior of the end product Contains Transmitter module FCC ID: 2AFZZ-MHCWB8S-B&2AFZZ-MHCWB8S-IB

To satisfy IESD exterior labeling requirements, the following text must be placed on the exterior of the end product " Contains Transmitter module IC:25903-MHCWB8SB&25903-MHCWB8SIB

IC ID:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

"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."

Le présent appareil est conforme aux CNR d'Industrie 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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC ID:

Manufacturer:xxxxx

Address: xxxxx

A voltage stabilizing element or circuit is required on the power supplies to the module, and then the power supply is sent to the modu

This equipment may be operated in all European countries