# 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                 | MHCWB5G-B&MHCWB5G-IB                                             |
| Product Name          | Wi-Fi/ BLE Moudle                                                |
| Major Chipset         | BL602C                                                           |
| WLAN Standard         | IEEE 802.11b/g/n                                                 |
| 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) |
| Modulation Method     | DBPSK/DQPSK/CCK(DSSS); BPSK/QPSK/16QAM/64QAM(OFDM)               |
| Data Transfer Rate    | 11b:1,2,5.5, 11Mbps                                              |
|                       | 11g: 6,9,12,18,24,36,48,54Mbps                                   |
|                       | 11n:HT20MCS0~HT20MCS7                                            |
| Antenna Reference     | MHCWB5G-B:WIFI/BLE Internal Printed ANT;                         |
|                       | MHCWB5G-IB:WIFI/BLE external ANT                                 |
| Interface             | UART                                                             |
| Supply Voltage        | $3.3V\pm0.3V$                                                    |
| Dimension             | MHCWB5G-B:18 (mm) *20 (mm) *2.5 (mm)                             |
|                       | MHCWB5G-IB: 18 (mm) *14.3 (mm) *2.5 (mm)                         |
| Operating Temperature | -40° C to 85° C                                                  |
| Storage Temperature   | -40° C to 85° C                                                  |

## 3. The display method of Model approved code

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

#### 4. 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: 2AFZZ-MHCWB5G-B FCC ID: 2AFZZ-MHCWB5G-IB

## 5. 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 yourbody. This transmitter must not be co-located or

operated in conjunction with any other antenna or transmitter.

The device complies with Health requirements when the device is used at 50cm from your body.

This EUT is compliance with SAR for general population/uncontrolled exposure limits in IC RSS-102 and had

been tested in accordance with the measurement methods and procedures specified in IEEE 1528. This

equipment should be installed and operated with minimum distance 50cm between the radiator & your body.

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 results 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 users authority to operate the device.

5. 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-MHCWB5G-B or FCC ID: 2AFZZ-MHCWB5G-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-MHCWB5GB or IC: 25903-MHCWB5GIB

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: 25903-MHCWB5GB

IC ID: 25903-MHCWB5GIB

Manufacturer: Xiaomi Communications Co.,Ltd.

Address: #019, 9th Floor, Building 6, 33Xi'erqi Middle Road, Haidian District, Beijing, China

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

supply is sent to the module

This equipment may be operated in all European countries.