

**HLW3215-TG / HLW3215-TG01** is an integrated WIFI& BLE dual-mode module, which is mainly used for products with high requirements for working temperature. HLW3215-TG / HLW3215-TG01 module is developed based on BK7231M. BK7231M\_QFN32-- integrated MCU/WLAN MAC/ Baseband/RF single chip scheme. ARM9 32-bit MCU core, 120MHz main frequency, built-in 256KB RAM.

- Supports 802.11b/G/N WIFI standard.
- Supports 802.11b/ G/N standards, HT-20
- Supports Station, Soft AP, Station+Soft AP
- With 20MHz bandwidth, the maximum transmission rate reaches 72.2Mbps
- Module built-in onboard antenna (for the antenna part, please refer to the antenna specification)
- working voltage: **DC 5V**

  

- Supports BLE 5.2standard,
- Supports 802.11 b/g/n 1x1 protocol
- 802.11b: 1, 2, 5.5, 11
- 802.11g: 6, 9, 12, 18, 24, 36, 48, 54
- 802.11n HT20: MCS0~7
- Supports STA/AP/Direct/Repeaternetwork model
- Supports SGI、 Green-Field Preamble and A-MPDU
- Supports WPA,WPA2,WAPI security regime
- Supports 50 MHz SDIO port
- On - chip 4M FLASH, support transparent download

#### Function description

HLW3215-TG is a Wi-Fi module used in home appliances, and the first batch of home appliances are dishwasher and oven. The module is implemented by HL3215STG core board + expansion board, which is provided to customers in the form of modules. The hardware and software architecture based on the module can realize the networking and the control of home appliances. Dishwasher and oven are controlled by the module to achieve their local control functions. They are connected to the cloud server through Wi-Fi and Bluetooth. Users can control the dishwasher and oven through the mobile terminal App to achieve remote control, and can connect to the Hisense Connectlife intelligent platform with intelligent and convenient use experience. In addition, the module supports OTA upgrades and can also assist in OTA upgrades of the MCU plate for dishwashers and ovens.

We will retain control over the final installation of the modular such that compliance of the end product is assured. If any hardware modify or RF control software modify will be made by host manufacturer, C2PC or new certificate should be apply to get approval, if those change and modification made by host manufacturer not expressly approved by the party responsible for compliance ,then it is illegal.

*The host device must be labeled to display the FCC ID of the module “Contains FCC ID: 2A9F9HLW32155V”*

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.

Any company of the host device which install the modular with modular approval should perform the test of radiated & conducted emission and spurious emission, etc. according to FCC part 15C : 15.407,15.247 and 15.209 & 15.207 ,15B Class B requirement, Only if the test result comply with FCC part 15C : 15.407,15.247 and 15.209 & 15.207 ,15B Class B requirement, then the host can be sold legally.

## **FCC STATEMENT**

1. 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.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 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.

## **Radiation Exposure Statement**

The modular can be installed or integrated in mobile or fix devices . This modular cannot be installed in any portable device if without further certification such as C2PC with SAR. This modular complies with FCC RF 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. This modular must be installed and operated with a minimum distance of 20 cm between the radiator and user body.

## IC warning

- English:

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.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

RF warning 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 20cm between the radiator & your body.

- French:

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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

Avertissement RF:

Cet appareil est conforme à IC l'exposition aux rayonnements limites fixées pour un environnement non contrôlé. Cet appareil doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps. Cet transmetteur ne doit pas être co-situé ou opérant en liaison avec toute autre antenne ou transmetteur.

### IC Radiation Exposure Statement

The modular can be installed or integrated in mobile or fix devices only. This modular cannot be installed in any portable device.

This modular complies with IC RF 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. This modular must be installed and operated with a minimum distance of 20 cm between the radiator and user body. Cette modulaire doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et le corps de l'utilisateur.

If the IC 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: 29823-HLW32155V”

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

1. 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.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

2. Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux

deux conditions suivantes:

(1) Cet appareil ne doit pas causer d'interférences.

(2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.

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.