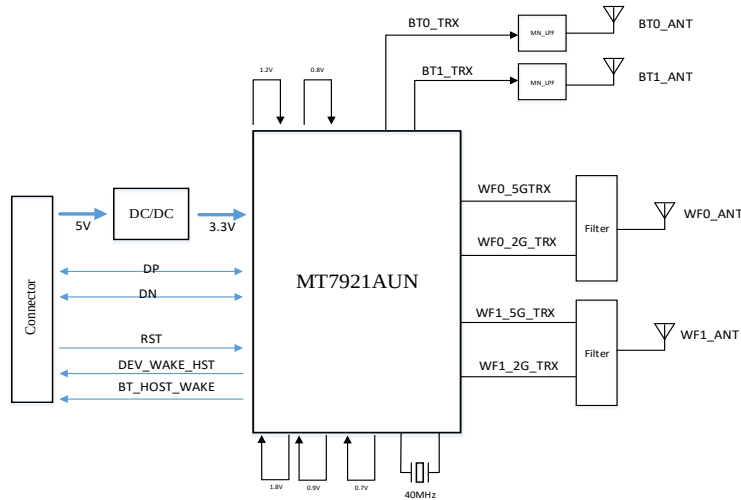


The user manual of WIFI、Bluetooth module

1. The product description

MW604 module is a low-power and high reliability Wi Fi module for IOT interworking. MTK WiFi & BT combo scheme is selected for the project, which supports 802.11a/b/g/n/ac/ax, 2T2R MIMO and dual BT5.2.Usb3.0 can be connected externally interface. WiFi / BT antenna adopts printed board antenna, compatible with BLE design and external pull antenna.



FunctionalBlockDiagram

2. 3. Features

System function

Main Chipset	MTK MT7921AUN
Operating Frequency	2.400 ~ 2.4835 GHz, 5.150 ~ 5.85GHz 5.9G-7.125GHz
Wi-Fi Standard	IEEE2.11a/b/g/n/ac/ax 2T2R 20M/40M/80MHz
Bluetooth	Bluetooth specification 2.1+EDR Bluetooth 4.2 Low Energy (LE) Bluetooth 5.2. Support mesh.
Modulation	WiFi: 802.11b:DBPSK,DQPSK,CCK for DSSS 802.11g:BPSK,QPSK,16QAM,64QAM for OFDM 802.11n:BPSK,QPSK,16QAM,64QAM for OFDM 802.11ac:BPSK,QPSK,16QAM,64QAM,256QAM for OFDM 802.11ax:BPSK,QPSK,16QAM,64QAM,256QAM,1024QAM for OFDM Bluetooth:GFSK, $\pi/4$ -DQPSK and 8-DPSK
interface definition	20pin FFC
Host interface	High speed USB 2.0 interface High speed USB 3.0 interface
Dimension	70 (mm) *33 (mm) *3.15(mm)

Ambient Operating Temperature	-10℃——70℃
storage Temperature	-40℃——85℃
Operation Temperature	5V±0.25

4. The display method of Model approved code

In the factory, the model approve code is pasted on the back shell in a label.

5. CE Statement



EU DECLARATION OF CONFORMITY

Hisense declares that the radio equipment type Hisense MWB414S .05 is in compliance with Directive 2014/53/EU.

6. FCC Statement

FCC regulatory compliance 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.

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

This Module complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Labelling Instruction for Host Product Integrator

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: SARMW604" any similar wording that expresses the same meaning may be used.

Installation Notice to Host Product Manufacturer

The OEM integrator is responsible for ensuring that the end-user has no manual instruction to remove or install module.

The module is limited to installation in mobile application, a separate approval is required for all other operating configurations, including portable configurations with respect to §2.1093 and difference antenna configurations.

Antenna Change Notice to Host manufacturer

If you desire to increase antenna gain and either change antenna type or use same antenna type certified, a Class II permissive change application is required to be filed by us, or you (host manufacturer) can take responsibility through the change in FCC ID (new application) procedure followed by a Class II permissive change application.

FCC other Parts, Part 15B Compliance Requirements for Host product manufacturer

This modular transmitter is only FCC authorized for the specific rule parts listed on our grant, host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.

Host manufacturer in any case shall ensure host product which is installed and operating with the module is in compliant with Part 15B requirements.

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.

7. ISSED Regulatory Compliance

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.

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.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Cet équipement est conforme aux limites d'exposition aux radiations IC CNR-102 établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20cm entre le radiateur et votre corps.

Please notice that if the IC 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 IC: 27123-MW604" any similar wording that expresses the same meaning may be used.

L'étiquette d'homologation d'un module d'Innovation, Sciences et Développement économique Canada devra être posée sur le produit hôte à un endroit bien en vue, en tout temps. En l'absence d'étiquette, le produit hôte doit porter une étiquette sur laquelle figure le numéro d'homologation du module d'Innovation, Sciences et Développement économique Canada, précédé du mot « contient », ou d'une formulation similaire allant dans le même sens et qui va comme suit : Contient IC: 23460-AL7605B est le numéro d'homologation du module.

- i. the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
 - ii. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
 - iii. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and
- i. le dispositif utilisé dans la bande 5150-5250 MHz est réservé à une utilisation en intérieur afin de réduire le risque de brouillage préjudiciable aux systèmes mobiles par satellite dans le même canal;
 - ii. pour les dispositifs à antenne (s) détachable (s), le gain d'antenne maximal autorisé pour les dispositifs dans les bandes 5250-5350 MHz et 5470-5725 MHz doit être tel que l'équipement soit toujours conforme à la norme e.i.r.p.

limite;

iii. pour les dispositifs à antenne (s) détachable (s), le gain d'antenne maximal autorisé pour les dispositifs de la bande 5725-5850 MHz doit être tel que l'équipement soit toujours conforme à la norme e.i.r.p. les limites, le cas échéant; et

9. 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 20 cm 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: SARMW604

To satisfy IESD exterior labeling requirements, the following text must be placed on the exterior of the end product " Contains Transmitter module IC: 27123-MW604



This symbol on the product or on its packaging indicates that this product must not be disposed of with your household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR
	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT
	SI	SK	FI	SE	UK	NO	IS	LI	CH	TR

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

Manufacturer: Qingdao Hisense Communication Co., Ltd.

Address: 218 Qianwangang Road, Qingdao Economic & Technological Development Zone, Qingdao, China

Importers:

Hisense France SAS

Address: 9 Rue des 3 Soeurs, 93420 Villepinte, France

Hisense Iberia, S.L.U

Address: Ronda Auguste y Louis Lumiere. 23 Nave 12. Edificio Lumiere - Parque Tecnológico 46980

Paterna (Valencia) - Spain

Hisense Italia S.r.l

Address: Via Montefeltro, 6/A, 20156 MILANO

Hisense South Africa

Address: The Estuaries, Building 17 Oxbow Crescent, Century City, Cape Town, SouthAfrica

10. Indoor Client 6XD

- a. Contention-Based Protocol, as demonstrated in the test report, is permanently embedded in the module and is not host-dependent.
- b. The device will only associate and connect with a low-power indoor access point or subordinate device and never directly connect to other client devices.
- c. This device will always initiate transmission under the control of a low-power indoor AP or subordinate except for brief transmissions before joining a network. These short messages will only occur if the client has detected an indoor AP or subordinate operating on a channel. These brief messages will have a time-out mechanism such that if it does not receive a response from an AP it will not continually repeat the request.
- d. Transmissions will be lower or equal to the power advertised by the indoor low-power access point or subordinate and never above the maximum output power allowed by the FCC grant for equipment class 6XD.
- e. Contention-based protocol as demonstrated in the test report is permanently embedded in the module and is not host-dependent. Furthermore, we fully understand this device is prohibited for control of or communications with unmanned aircraft systems, including drones.