WIFI module

user's manual

Correct record

versions	Date	Describe	Contributors and translators
Ver1.0	2016-01-05	The front page	lender

Directory

1.Summarize

720P is using a standard 2.4G band WIFI protocol (in accordance with b/n/g international standard wireless video transmission module to realize wireless), is the minimum volume of domestic WIFI video module the module uses advanced image compression technology H.264, high compression ratio of the data stream, and then through the wireless WIFI and point the way to send any display terminals (Android, iPhone and other smart mobile phone or computer terminal), by the display terminal to complete the real-time video display, video, pictures, data processing and other applications of the two-way transmission.

- High speed, stable video transmission
  - ✓ H. 264 format video streaming transmission
  - ✓ Took photos and video wireless transmission, the realization of terminal equipment video video recording and playback, and other functions
  - ✓ U high resolution video display, support 720 p high-speed transmission
  - ✓ Point to point mode of operation, transmission need not through the network
  - ✓ Support two-way serial communication

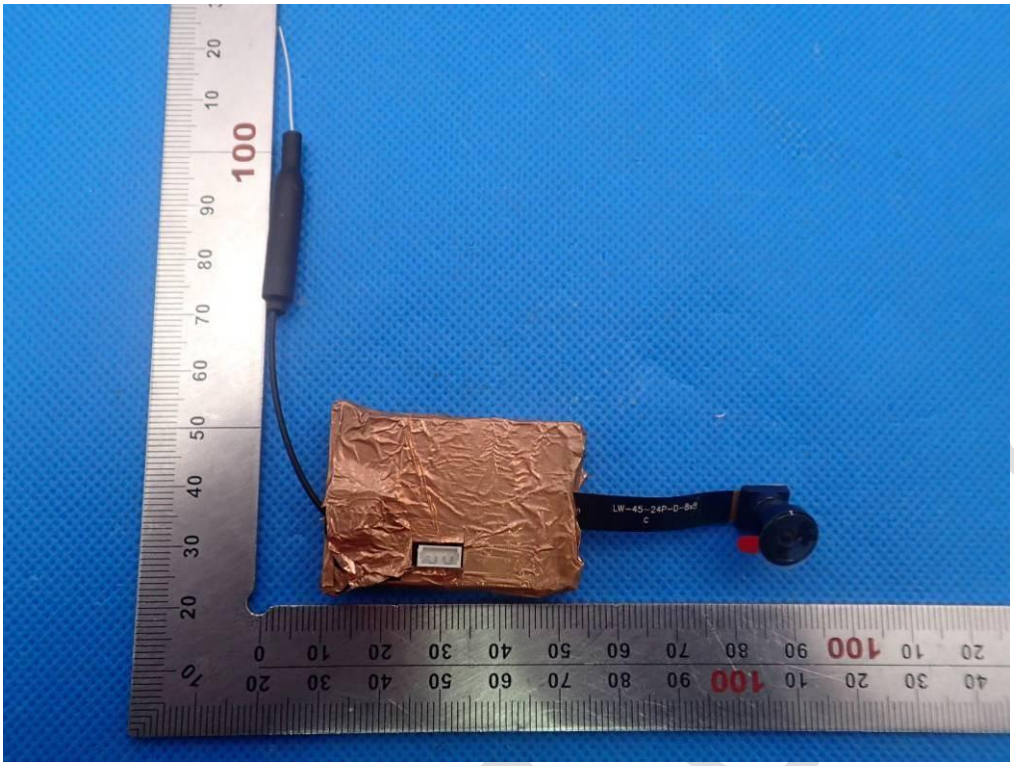
- Multiple platform terminal video display and control
  - ✓ Windows client video display
  - ✓ Android mobile phone video display
  - ✓ Apple mobile phone video display

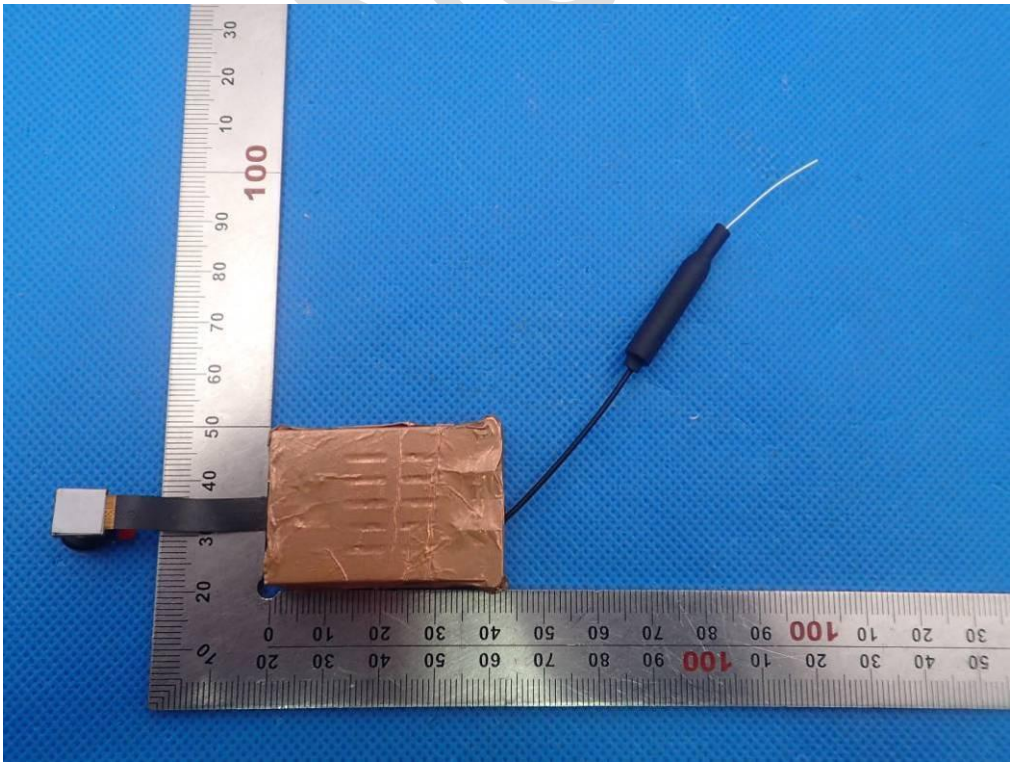
- Easy to use, low power consumption and power supply is convenient
  - ✓ 3.3-5Vpower supply
  - ✓ Low power consumption, normal work is about 1.5 W

  Simple operation, any smartphone can like even the routing in the home, even in the open software can see video

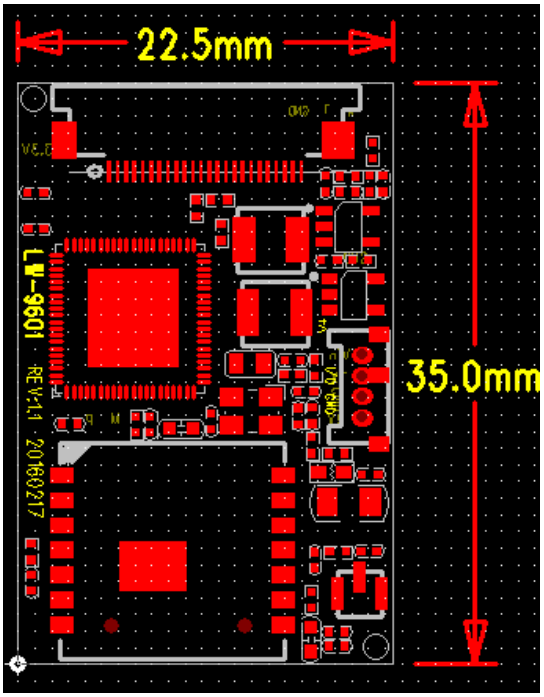
- Safe, reliable WIFI link
  - ✓ Support for the center with AP communications network
  - ✓ Support the IEEE 802.11 b/g/n
  - ✓ Supports external antenna, greater distances

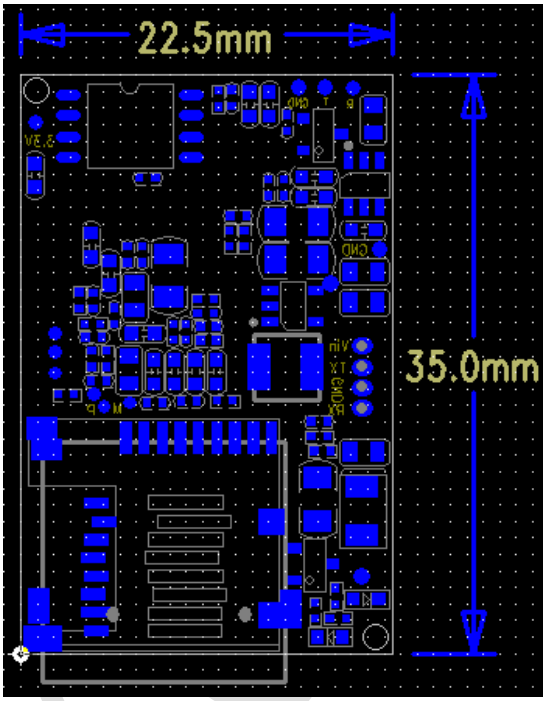
2.Graphic module products





3.Modular size





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4.Module Features

1、Module is small in size and is currently on the market the smallest WIFI video module，22.5*35MM

2、Module is a highly integrated, master with built-in DSP and SDRAM, only need a master control most of the work is completed；

3、WIFI rapid start：Power-on 12 S Namely the WIFI；

4、low power dissipation，power supply scope 3.3-5V，can match lithium battery；

5、Higher resolution，Support for 1080 * 720 hd resolution；

6、longer transmission distance ，Quick response，Empty can reach 100-150 m；

7、Time delay is small，Basic delay within 50-100 ms, the human eye can not see basic delay, very smooth；

8、Support the TF card real-time video storage, may through the phone TF preview playback；

5.Module Feature

content	Parameters to describe
Supported protocols and standards	802.11g/n agreement、802.11b Agreement
Power waste	1.5W
Camera	H42
Module output sampling rate	20 frame
Working model	AP Pattern
transmission speed	Maximum 150MHZ
Antenna mode	External antenna
sensitivity	<-70dBm
working frequency	2412 ~2462 MHz
LED Instructions	The red light often lights up for normal work
Transmitted power	>14dBm
Support operating system	IPHONE/ANDROID
working voltage	3.3-5V
working temperature	-10℃ ~ +70℃
delayed	<=100ms
Module size	22.5*35*7mm
boot time	10-15S
Resolving power	1080*720P
communication protocol	serial port
Maximum distance	150 metre
Wireless mode	AP

6. application area

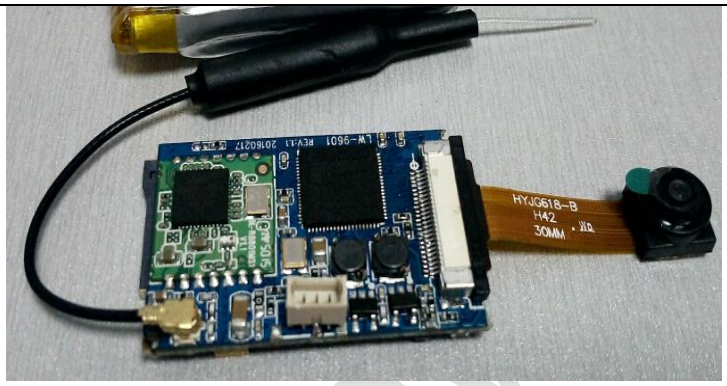
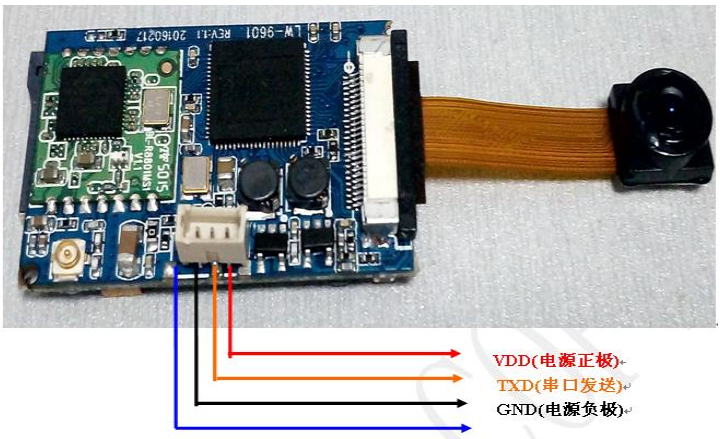
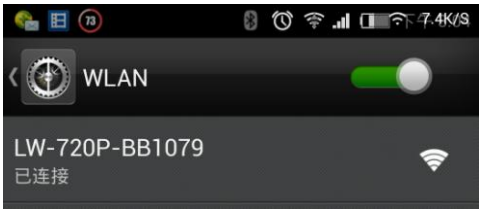
WIFI everywhere, WIFI basically become a part of our life will not lack the WIFI application also widely used, the WIFI video module you can understand the wireless route home, after power on, automatically send WIFI signal can be connected with the WIFI search through the intelligent mobile phone or computer module, the video or audio signal real-time transmission to the intelligent terminal display in the form of WIFI, WIFI is characterized by large bandwidth, stable transmission, wireless communication is incomparable, such as Bluetooth to transmit video, the WIFI can realize remote operation, the operation is more simple and convenient, has been widely in many industries.

- Baby monitor
- Toys, mobile phones, remote control, flight control, four axis
- Air conditioner, mobile phone remote control
- Industrial WIFI to UART applications
- Car, vehicle recorder
- Security products

  Medical or professional application areas

7.Operation steps

NOTE: This equipment has been tested and found to comply with the limits for a

Step 1: understand the module **1 、 WIFI video module mainboard** **2, antenna one**	
The second step: to module power **1, power supply mode: lithium battery power supply** **2, module interfaces, such as the right:** **TXD: serial port send, used for instruction communication** **RXD: serial port receiver used for instruction communication**	
The third step: install the software (using Android as an illustration) **1, Android Mobile: unpack the package to find Android software, use 360 mobile assistant or copy to the phone SD card installation or Apple software**	 Drone 720P 
The fourth step: connect WIFI **Enter the mobile phone WIFI search list, can find a new name for "LW-720P+ WIFI, the default random number, each module corresponds to a WIFI name, name of software through software in the settings menu to modify, no WIFI password, click on the link to**	
The fifth step: open the software **1, open the third step of the installation of software, showing a LOGO** **1、2, point to a LOGO diagram, into the receiving video interface**	

FCC/IC Statements

(OEM) Integrator has to assure compliance of the entire end-product incl. the integrated RF Module. For 15 B (§15.107 and if applicable §15.109) compliance, the host manufacturer is required to show compliance with 15 while the module is installed and operating.

Furthermore the module should be transmitting and the evaluation should confirm that the module's intentional emissions (15C) are compliant (fundamental / out-of-band). Finally the integrator has to apply the appropriate equipment authorization (e.g. Verification) for the new host device per definition in §15.101.

Integrator is reminded to assure that these installation instructions will not be made available to the end-user of the final host device.

The final host device, into which this RF Module is integrated" has to be labeled with an auxiliary label stating the FCC ID of the RF Module, such as "Contains FCC ID: 2AEV70754-85838579

This device is acting as slave and operating in the 2.4 GHz (2412 ~2462 MHz) band.

"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."

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

the Integrator will be responsible to satisfy SAR/ RF Exposure requirements, when the module integrated into the host device.

The final host device, into which this RF Module is integrated" has to be labeled with an auxiliary label stating the IC of the RF Module, such as" Contains transmitter module IC: 23034-85838579

This device complies with Industry Canada licence-exempt RSS standard(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.
Le pr ésent appareil est conforme aux CNR d'Industrie Canada applicables auxappareils radio exempts de licence. L'exploitation est autoris ée aux deux conditions suivantes :(1) l'appareil ne doit pas produire de brouillage, et(2) l'utilisateur de l'appareil doit accepter tout brouillage radio électrique subi, m ême si le brouillage est susceptible d'en compromettre lefonctionnement.

Module statement

The single-modular transmitter is a self-contained, physically delineated, component for which compliance can be demonstrated independent of the host operating conditions, and which complies with all eight requirements of § 15.212(a)(1) as summarized below.

1) The radio elements have the radio frequency circuitry shielded.
2) The module has buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal.
3) The module contains power supply regulation on the module.
4) The module contains a permanently attached antenna.
5) The module demonstrates compliance in a stand-alone configuration.
6) The module is labeled with its permanently affixed FCC ID label.
7) The module complies with all specific rules applicable to the transmitter, including all the conditions provided in the integration instructions by the grantee.
8) The module complies with RF exposure 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

RF Exposure Warning Statements:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
This equipment shall be installed and operated with minimum distance 20cm between the radiator & body.

This equipment could not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with the FCC multi-transmitter product procedures.