

Transmitter (STA) Video module RAK566 user manual

RAK566 is a long range 5.8G WIFI video module with Full HD(1080P@30FPS) transmitting.
 1080P(1920*1080)@30FPS;
 720P(1280*720)@30FPS;
 VGA(640*480)@30FPS.

PIN Definition



Label 1 Power definition

Label 2 Data(UART) definition

PIN	Name	PIN	Name
1	VCC 7-23V		
2	VCC 7-23V	1	UART TX ,TTL
3	GND	2	UART RX ,TTL
4	GND	3	GND

Notes: the power interface strictly prohibit to connect other connector . Or that must damage the module .

DATA INTERFACE :

This UART is using for TRANSPARENT DATA .The socket will use UDP protocol .The IP address is the module' s valid IP address , and the UDP port is 1008 .

When the wifi device(smart phone) connect the softAP , the wifi device(smart phone APP) must open the UDP socket , and then send data to RAK566 module firstly . Once the module get the data , the data will be send out via UART and the module will remember the wifi device' s IP and UDP PORT. After that the module can send data back once the module receive data via UART .

Before Sending data to the module , you must add the protocol head (0x01 0x55) before the valid data . The module will cut off the protocol head and send the valid data via UART to the host MCU . The host MCU send the valid data to the module via UART . The module will add the protocol head(0x01 0x55) again before sending to wifi device .so the smart phone APP will get the data including protocol head.

Such as, all data is HEX data .

sending : **01 55 66 88 99 00 44**(5bytes valid data)

ACK: **01 55 88 99 00 44 33**(5bytes valid data)

DIP Switch definition



Notes: The DIP Switch is using for some new function . Must keep the lebel 3 and lebel 4 localing in OFF position.Or willl make the module abnormal .

Android APP: <https://www.pgyer.com/camsight>

IOS APP : Search in APPLE STORE with **camsight sport** and install.

Support Center:

supporten.rakwireless.com/

Website:

www.rakwireless.com

APP SDK Source code(rakvideo):

www.github.com/rakwireless

Flylink HD(+) Web Configuration Application Notes

Note: Please make sure your smartphone supporting 5G WIFI!

1, Firstly, power on the receiver and transmitter and waiting the blue LED light more than 10s. Open your smartphone' s WIFI setting and connect the receiver' s SOFTAP name (FS_5G_AP_XXXXXX or Flylink_XXXXXX) .



2, Please make sure your transmitter' s blue LED lighting more than 10s. Open camsight ,and click the play icon in the bottom-right corner. Then you can play the video now .



3, This product will show the transmitter' s IP address when you play the video .Camsight can record or take photo in local time . and within 3 seconds, APP show the TX IP address .



4, Set WIFI parameter.

According to Step 3 , Get the TX' s IP Address . then Open the browser and input IP/wifi.php. such as:192.168.1.110/wifi.php.

User: admin. Password : admin.

用户:	USER
密码:	PASSWORD
登录	LOGIN

Now ,you get the WIFI config page .like this :

Once you change the parameters ,please click the button to save the parameters .

WIFI工作模式:

AP_SSID:

AP_CHANNEL:

AP_AUTH_MODE:

AP_ENCRYPT_KEY:

AP_HIDE_SSID:

AP_IPADDR:

AP_NETMASK:

AP_GATEWAY:

AP_DHCP_START:

AP_DHCP_END:

STA_SSID:

STA_ENCRYPT_KEY:

STA_STATIC:

STA_IPADDR:

STA_NETMASK:

STA_GATEWAY:

DEV_NAME:

BAUDRATE1:

5, Set video parameters.

And iput : IP/test.php. such as : 192.168.1.110/test.php.

User: test. Password : test.

Now ,you get the Video config page .like this :

Once you change the parameters ,please click the button to save the parameters .

Note : you only need to change PIPE0 .

PIPE QUALITY MAX VALUE : 90.

版本信息:

Nabto ID:

PIPE0 分辨率: resolution

PIPE0 帧率(0-30): Frame rate

PIPE0 质量(0-52): Quality 52=3Mbps, 26=1.5Mbps

PIPE0 GOP(0-300): I-interval, default

Update

PIPE1 分辨率:

PIPE1 帧率(0-30):

PIPE1 质量(0-52):

PIPE1 GOP(0-300):

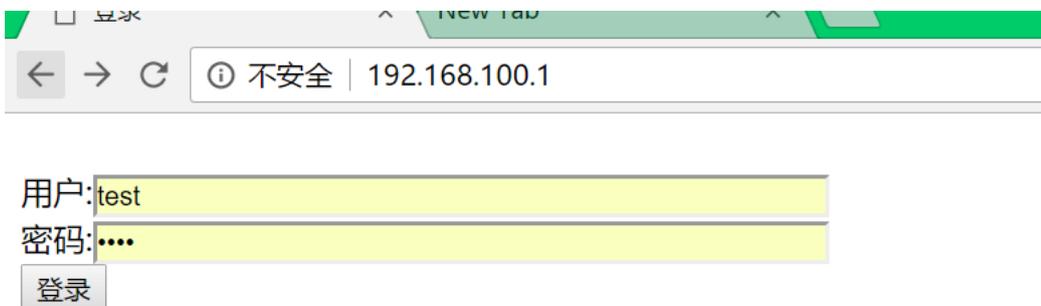
6, Set RTMP streaming only for Flylink HD+.

6.1 RTMP streaming Tools

- 1) Router with ethernet port which can connect to Internet.
- 2) Flylink HD+ receiver can output video via HDMI or WIFI to phone .
- 3) Because of the network bandwidth in internet ,suggest the video bitrate is less than 2Mbps which set in Transmitter .
- 4) A valid youtube RTMP url which get from the RTMP server.

6.2 Set RTMP streaming

- 1) Connect to receiver with your phone or PC which support 5.8G wifi .the default wifi password is 12345678.
- 2) Open browser with IP address 192.168.100.1。 input the user and password,both default are test.



- 3) Set receiver IP Address. The static IP will be best because you can play the video in local mode.

Suggest the DNS SERVER :114.114.114.114 or 8.8.4.4.

← → ↻ ⓘ 192.168.100.1/test.php

基本信息

版本信息: WIFIS_HD_V1.53

Nabto ID: lx520.cc7003.p2p.rakwireless.com

解码视频分辨率: 1280x720

解码音频采样率: 48000

本地网络配置

DHCP: 静态IP ▾

IP地址: 192.168.1.98

掩码: 255.255.255.0

网关: 192.168.1.1

主DNS: 114.114.114.114

备DNS: 192.168.1.1

更新配置

- 4) Input the RTMP streaming URL. Then enable streaming .

推流配置

使能推流: 启用 ▾

Enable streaming . 启用: Enable

推流链接: rtmp://video.RAK.tv/watch/p7ndvb

推流状态: 断开

streaming status

更新配置

- 5) After above setting ,you must restart the board and you can get the streaming status from the webpage.