Flylink HD(RAK566+RAK554) Video module user manual

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

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

Label 1 Power definition   Label 2 Data(UART) definition

Notes: the power interface strictly prohibit to connect other connector . Or that must damage the module . Label 2 have been removed from Hardware version V1.2.

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 .

Receiver（AP）Video module AK554 user manual

RAK554 is a long range 5.8G WIFI video module .

PIN Definition

Pin	Name	Description	Remark
1	VDDIN	12V VCC	12V power input
2	VDDIN	12V VCC	12V power input
3	GND	GND	GND
4	GND	GND	GND

Dip switch definition

There are 6 group Dial-up in the module . ON direction is showing low-level ,marked as 0.

When The Dial-up is on the opposite direcetion ,that is showing high-level,marked as 1 .

The dial-up flag order is 1-6,marked as sw1-6.

The function definition is followed :

Sw6	Sw5	Band	Channel	Band
1	1	4	149	5745
1	0	1	48	5240
0	1	1	36	5180
0	0	4	165	5825

The default band is Band4. That is to say channel 149.

After power on the module,please scan the softap's name : FS_5G_AP_xxxxxx or **Flylink_xxxxxx**(**please make sure your smartphone supporting 5G SSID**) .   X means MAC address.

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

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

Document Center :

www.rakwireless.com/en/download

wiki.rakwireless.com/doku.php

Support Center :

supporten.rakwireless.com/

Website :

www.rakwireless.com

APP SDK Source code(rakvideo) :

www.github.com/rakwireless

RAKVideo APP Camsight user manual

> **Note：Please make sure your smartphone supoorting 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 .

4，In Camsight home page,you can input the RTSP URL to request the streaming in any product including Flylink product. Flylink product 's URL is showing in the picture .
rtsp://admin:admin@192.168.1.110/cam1/h264.
Note :IP must be the transmitter's Valid IP.

2