Flylink HD+（RAK566+RAK567） 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

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)
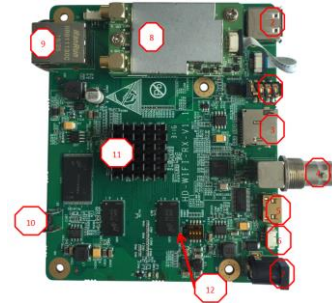
DIP Switch definition

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 .

Receiver (AP) Video module AK567 user manual

RAK567 is a long range 5.8G WIFI video module with HDMI ,SDI or CVBS video outputting.

PIN Definition

Label	Name	Description
1	CVBS	CVBS output interface
2	USB	USB output interface,Customizing
3	TF card	TFcard .
4	SDI	Suopport 3G-SDI vedio output Customizing
5	Mini-HDMI	Support high definition vedio HDMI output
6	UART	High speed UART transparent transmission,Defult Bound rate 115200.
7	DC power	9-24V DC power supply
8	WIFI module	5.8G high-power WIFI module，double antenna,Highest Transmit power:23dB
9	Ethernet	1000M full-duplex Ethernet Interface
10	Button	Functional button，WPS Configuration、restore factory etc.
11	CPU	CPU
12	DIP switch	Function selector switch，exchange channel

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.the password is 12345678.

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.