

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	Description
1	VDDIN	12V VCC
2	VDDIN	12V VCC
3	GND	GND
4	GND	GND

Pin	Name	Description
1	NC	
2	UART1_TXD	UART1 TX , DATA
3	UART1_RXD	UART1 RX , DATA
4	GND	GND

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	Central Frequency
1	1	Band1	36	5180
1	0		48	5240
0	1	Band4	149	5745
0	0		165	5825

The default band is Band1. That is to say channel 36. If you are localing on china or Taiwan , you' d better set he channel to Band4 any channel .

Sw1 is using for WPS function . If you want to use this function , you need do the following steps.

- 1) set SW1 into low-level more than 1 second .
- 2) Then Set SW1 into high-level .Then Wifi light will blink.that is showing you have step into the WPS mode.

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



IOS



<https://www.pgyer.com/rakvideotest> Search **RAKVIDEO** in APP STORE

RAKVideo APP user manual

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 RAKVIDEO app and waiting APP find a new device ,such as named 67054f device.blue color means the device is online .if you don' t find the new device ,please click the refresh icon in the top-right position.

Note: please don' t click the add icon. It is not using for Flylink HD product.



3 ,Suggest select the software Encode and that have good compatibility. The default password is admin ,and connect to view the video. The smartphone' s landscape mode will make the video full-screen play.



4 , Flylink HD can support local video play and record and serial port data interaction.the default video resolution is 720P. Temporary does not support SD record.

