

## 2.4G Wireless video & Audio module Functional Specification

**SA618T—Wireless Video & Audio transmitter**

**SA618R—Wireless Video & Audio Receiver**



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## 1.Overview

SA618T/SA618R are industrial wireless video & audio module. SA618T is the transmitter and SA618R is the receiver. The modules are integrated with high performance micro controller, high quality video & audio modem, RF and audio amplifier. The modules include all the feature : Multi-channels can be selected to avoid the frequency collision; Low voltage ; long distance of wireless communication; high quality of the wireless video and audio; very easy to use.

## 2.Feature

- 5V USB interface power supply
- Universal Line IN –SA618T
- Working frequency 2.4GHz  
(2370-2510MHZ)
- Transmission distance 200 meters(open area)
- 8 channels can be selected
- Video , audio (left , right channel) Input  
/Output
- AV input / output supported
- Universal Line in / Line out supported
- Single Video input / output supported
- Single audio input / output supported
- LED Indicator for current working channel
- Data saved even powered off

## 3.Application

- Baby Monitor
- Security Monitoring
- aircraft model
- home audio and video wireless transmission
- wireless audio and video toys

**4. Performance parameters**

Parameters	Min	Type	Max	Unit	Conditions
Running conditions					
Operating voltage range	3.5	5	5.5	V	
Operating Temperature Range	-20	25	+80	°C	
Performance parameters					
Operating frequency range	2370		2510	MHZ	
Output Power	17	18		dBm	@5V (SA618T)
Reception sensitivity		-87		dBm	SA618R
TX Current		<80		mA	@5v(SA618T)
RX Current		<140		mA	SA618R
Video signal standard	NTSC/PAL				
Input/Output voltage of video		1.2		Vp-p	@75 Ohm
Input/Output voltage of audio		2		Vp-p	@2k Ohm

**5.Interface**


SA618T /SA618R Pin definition	
C1	Video input
C2	5V power supply
C3	<b>line in for audio/SA618T; line out for audio/SA618R</b>
U1	key to select the working channel
U2	Led1 indicator for working channel
U3	Led2 indicator for working channel
U4	Led3 indicator for working channel
U5	Female SMA connect

cable definition			
Yellow	Video input/output		
white	Audio input/output (left channel)		
Red	Audio input/output (Right channel)		
LED status for selected Working Channel			
	LED3	LED2	LED1
ch0	off	off	off
ch1	off	off	on
ch2	off	on	off
ch3	off	on	on
ch4	on	off	off
ch5	on	off	on
ch6	on	on	off
ch7	on	on	on

## 6.Operation

◆ Connect all the devices with SA618T/SA618R before powered on. All the 3 LED will blink 3 times and stay in the previous set channel after powered on. User can press key to select one of the 8 channel, the selected channel will be stored in the memory and keep unchanged even powered off. And all the 3 LED will turn on /off to indicate the channel used currently. The receiver can only receive the signal with same channel.

◆ SA618T/SA618R can be set as repeater easily when communication range is not enough in some application. Below is method to add one repeater between U1 and U4, multi-repeater can be used for longer range application.

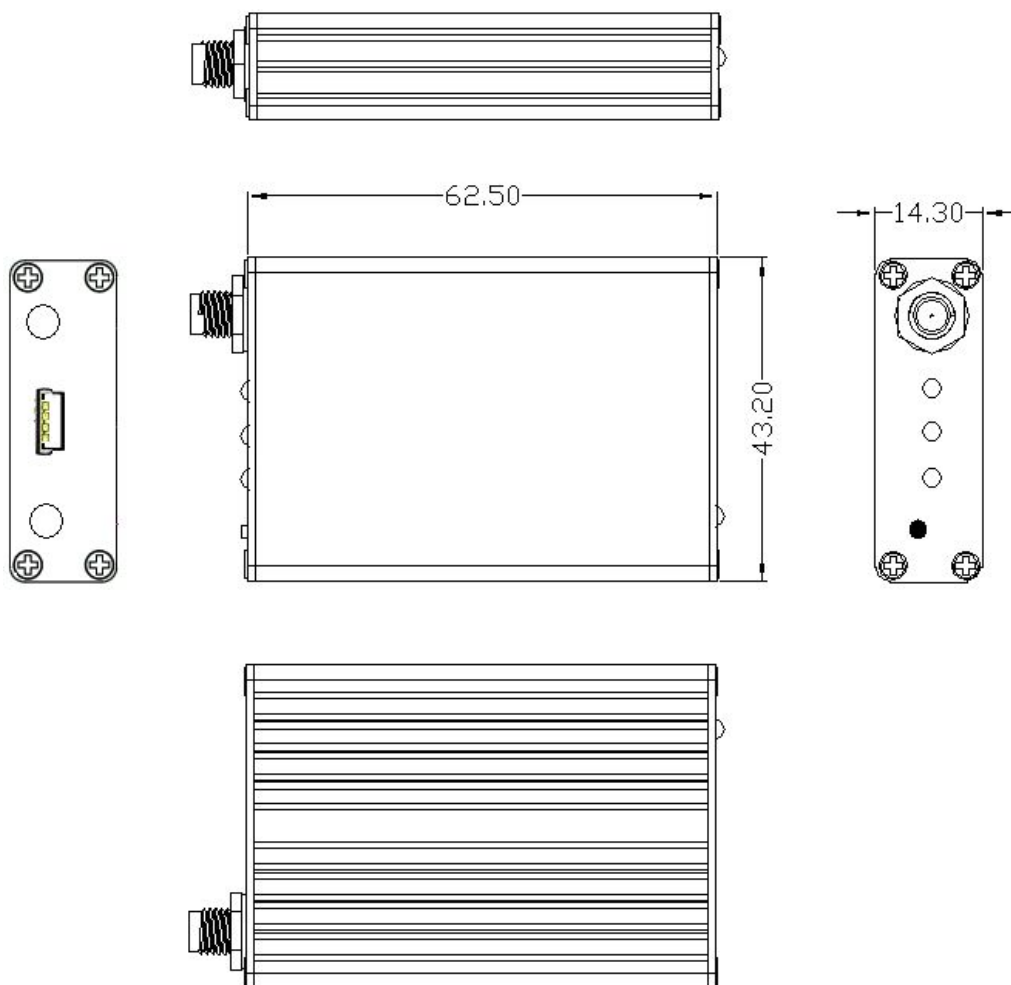
1, Connect the input of SA618T and output of SA618R with cable

2, set the working channel: U1 ch0, U2 ch0; U3: cha7; U4: ch7, here U1 and U3 are SA618T and U2, U4 are SA618R. U2, U3 are the repeater.

◆ User can select the power supply by themselves, good power supply will bring the good quality of the video and audio, we strongly suggest customer using the power supply recommend from us.



## 7. Mechanical Dimension



## 8. Frequently Questions

- a) Why does the receiver could not receive audio and video signals?
- ◆ Check if transmitter and receiver are the same channel
  - ◆ Check if the audio and video connect correctly;
  - ◆ Check if power supply is connected correctly
  - ◆ Change to another channel to avoid frequency collision.
- b) Why does the transmission distance is not far?
- ◆ Check if Power supply ripple is too large;
  - ◆ Check if the antenna well matched and connected ;
  - ◆ Change to another channel to avoid frequency collision;
  - ◆ Put the modules at another place