# VGA WIFI Camera WD8509

### Introduction

The Wi-Fi camera WD8509 is designed for the FPV hobbyist. Thiscamera provides high resolution video and images at VGA@20fps. The color and clarity of the image is superb, supporting MJPEG video compression technology, giving you the best picture possible and wireless FPV experience.

### Main features

WIFI streaming video
Support Smart phone, Ipad devices
SupportAP modes
Main interface: CRIC LIART

Main interface: GPIO、UART

Working distance without obstacle and interference: 50m

## Main application

Monitoring RC tank, RC airplane etc Intelligent home Car Camera

### **Technical Index**

WIFI	2.4G
Antenna type	Wire Antenna, 2dBi Gain
Image sensor pixel size	640x480 pixels
Lens module	1/4" M6
Lens angel (deg.)	65 degrees
PCBA Board size	
L(mm)xW(mm)xT(mm)	21.5 mm *17.6 mm *1.0 mm
Video Compression scheme	MJPEG

HD resolution recording	640x480 pixels 20fps		
Video streaming (p)	640x480 pixels 20fps		
Protocol / Standard	IEEE 802.11b/n		
Frequency Range	2412MHz for 11b/n(HT20)		
MODULATION	DSSS, OFDM		
TECHNOLOGY			
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS		
	64QAM,16QAM,QPSK,BPSK for OFDM		
Transmission rate	54/48/36/26/19.5/13/11/5.5 /1M		
Transmit power	11M	13db	
	54M	10db	
Receiver sensitivity	11M	-72dBm@10%PER	
Working voltage/ current	5.5M	-85dBm@8%PER	
	1M	-88dBm@10%PER	
	3.5-5.5V		
	220mA at 4.0v by idle		
	mode, 200mA~400mA at		
	4.0v by real time video		
	streaming	-90dBm@8%PER	
Wire connector	VCC (Red Wire)		
	GND (Black wire, close to red wire)		
Working temperature			
	0°C- 60°C		
Working humidity	10% -90% RH		
Storage temperature	-40°C70°C		
Storage humidity	5%90% RH		

## **Module Drawing**

## **Operation introduction**

Download the Free App that release by JHin Apple Store or Google Play.

Turn on our WD8C25WiFi camera. The camera will take about 5 seconds to boot and power on.

On your phone/tablet, turn on WiFi and search for the hotspotin the WLAN list. The WiFi camera has a built in WiFi hotspot so no other WiFi network is needed.

NOTE: The camera will not link via Bluetooth – it is WiFi only.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

ionowing measures.
☐Reorient or relocate the receiving antenna.
$\square$ Increase the separation between the equipment and receiver.
$\square$ Connect the equipment into an outlet on a circuit different from that to which
the receiver is connected.
☐ Consult the dealer or an experienced radio/TV technician for help.

FCC RF Radiation Exposure Statement Caution: To maintain compliance with the FCC's RF exposure guidelines, place the product at least 20cm from nearby persons

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.