

## Description

### Introduction:

The module provides designers with a ready made component that provides a fully integrated solution for applications, using the IEEE802.11 standard in the 2.4-2.5GHz ISM frequency band, including 802.11b/g/n and also provides IEEE802.3, can be quickly and easily included in product designs. The modules integrate all of the RF components required, removing the need to perform expensive RF design and test. Products can be designed by simply connecting sensors and switches to the module IO pins or uart interface. The modules use ralink's chip Wireless Microcontroller, allowing designers to make use of the serial interface to connect with their device Hence, this module allows designers to bring wireless applications to market in the minimum time with significantly reduced development effort and cost.

This product is an embedded module based on the universal serial interface network standard, built-in TCP / IP protocol stack, enabling the user serial port, Ethernet, wireless network (WiFi) interface between the conversions. Through the module, the traditional serial devices do not need to change any configuration; data can be transmitted through the Internet network. Provide a quick solution for the user's serial devices to transfer data via Ethernet Also the module have FCC modular approvals and is compliant with EU regulations.

### Features:

- 2.4GHz 802.11b/g/n, compatible
- Support IEEE 802.3、IEEE 802.3u
- WiFi Client/AP/Router Mode
- Support wps/wds
- The range of baud rate: 1200~500000bps
- Support transparent transmission mode
- Support multiple security authentication mechanisms:  
WEP64/WEP128/TKIP/AES  
WEP/WPA-PSK/WPA2-PSK
- Support wireless roam
- Support multiple network protocols:  
PPPOE/TCP/UDP/DDNS /DHCP/DNS/HTTP/Firewre
- Support AT+ instruction set
- Support two config methods: Serial/WEB
- Device Dimensions 29mm\*40mm\* 8.8mm

### Benefits:

- WiFi Router module solutions
- Ready to use in products
- Minimizes product development time
- No RF test required for systems
- Compliant with CE and FCC part 15 rules.
- Serial to WiFi; Serial to Net; Both by one module
- Lead-free and RoHS compliant

**Please pay attention to run the Arduino on 5V as the max voltage for the WiFi module is 5V**

