# WIFI Module Data Manual



**Brief Introdution** 

WIFI is the brand new third generation UART- Wifi flushbonading module of Yuanjia Tech..

UART- Wifi is basic UART connector conform Wifi wireless internet standard to flushbonading module, with IEEE802.11 and TCP/IP wireless network protocol stack inner wap ,which can transform from manual serial data to wireless network. Through the UART- Wifi module, make the troditional serial port connect to wireless network easily.

Furthermore, WIFI module except for STA connecting troditional Infra net and Ad-hoc net, it also support soft AP mode. Network card work under the AP mode can provide smartphone etc. the connecting function of hand-held terminal. Meanwhile, WIFI module come ture DHCP Server and DNS Server in order to provide smart terminal zero Configuration connecting at the same time for user experience better, but need to attention that DNS Server only provide the domain name analytic function of WIFI module .

Preparing before two generation product, WIFI have conducted a comprehensive upgrade, stronger function, use more simple:

- Comprehensive better serial transparent data transmission mode, realize plug and play of the serial port
- ♦ Smaller power consumption(430mW)
- ♦ The size of the smaller: 20mm×37mm
- ❖ Provide the server software, mobile phone APP application software design custom service, flexible application software platform can be optional.

#### Product Characteristics Connector

- ♦ Double row pin type interface: HDR254M-2X4
- ♦ Support the baud rate range:1200~115200BPS
- ♦ Support hardware RTS/CTS Flow Ctrol
- ♦ Single 3.3 V power supply

#### Wireless

- ♦ Support IEEE802.11b/g wireless standard
- ♦ Support two type of wireless: Infra and Ad-hoc
- ♦ Support soft AP ,at most support 4 STA connector
- ♦ Support multiple security authentication mechanism:

# OPEN/WEP64/WEP128、TKIP/CCMP(AES) OPEN/WEP/WPA-PSK/WPA2-PSK

- ♦ Support fast networking( specific channel and BSSID)
- ♦ Support unlimited roaming
- Support agreement and energy saving(PS-POLL style)
- ♦ Support network automatically created when you don't exist

## Others

- ♦ Support for multiple network protocol: TCP/UDP/APP/ICMP/DHCP/DNS/HTTP
- ♦ Support DHCP Server/DNS Server
- ♦ Supports automatic and ordered two work modes
- ♦ Support serial transparent transmission mode
- ♦ Support AT + control instruction set
- Support for multiple parameters configuration mode:
  - serial port/WEB Server configuration/wireless card
- ♦ Built-in friendly Web configuration page
- ♦ CE/FCC/WiFi/ ROHS compliant

### **Application Fields**

- ♦ Intelligent home appliances, Intelligent household
- ♦ Medical care、Intelligent toys
- ♦ Automotive electronics, Industrial control
- ♦ Smart grid、Internet of things

#### **FCC Compliance Statement:**

This device complies with Part 15 of the FCC rules. Operation is subjected 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.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

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:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- 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 Label Instructions:**

The outside of final products that contains this module device must display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: ZO4-ROBSTEPWIFI" or "Contains FCC ID: ZO4-ROBSTEPWIFI" Any similar wording that expresses the same meaning may be used.

This equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Product operating temperature: < 40 °C.

# **CE Mark Warning**

CE 0700

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.