

3G/4G Industrial Wireless Router EP-N9552

User Manual

Chapter 1 Product Description

Industrial Wireless Router is a wireless communication product with excellent performance developed on the basis of 3G/4G network requirements. It is mainly used in data transmission services of industrial users, supporting data transparent transmission and wireless routing network access functions.

WI600A uses a 32-bit processor with high performance, which can process protocols and large amounts of data at high speed, and can be combined with a variety of 3G/4G industrial modules (WCDMA/EVDO/TD-SCD network). Provide WH wireless interface, serial port, USB interface. It can be connected to a variety of terminal devices.

Support WEB configuration, easy management, support remote message control.

Software specification

Software specification	operating system	OPENWRT
	language	Optional (Simplified Chinese, English), automatically adapted to the language of the browser
	system status	External network information, intranet information, 4G information, VPN information, advanced application information, traffic statistics, running time
	One-click setting	Intranet settings, wireless settings
	System settings	Gateway mode, bridge mode, WISP mode
	Basic Settings	External network settings, wireless settings, intranet settings
	Advanced application	Virtual private VPN, firewall, QOS, DDNS, serial port transparent transmission, portal setting, short message service, GPS positioning
	System settings	Change password, system configuration, time setting, upgrade, custom restart, system log

1. Hardware Connection and Description of Products

1.1 Front Panel



Indicator status description

name	status	description
System light	always bright	System lights are always on after power on, indicating that the power supply is normal
	Slow flash	Five seconds before power-on is always bright, then about 10 seconds after power-off, from extinction to slow flash, indicating the operation of the system normally
	Quick flash	After pressing the reset button for 5 seconds, the system light will flash. The system will reboot later
LINK Indicator light	Extinguish	Haven't found module or SIM card
	Slow flash	Already found module and SIM card
	Quick flash	dialing
	always bright	On line
LAN1、LAN2 light	always bright	RJ45 port already connected
	Extinguish	RJ45 port haven't connected

Front panel interface description

Name	Function
ANT 3G/4G	LTE antenna port
ANT WiFi	WiFi antenna port

ANT WiFi	WiFi antenna port
R	Restore factory button
UART Port	Serial port
SIM	SIM card slot
PUSH	SIM card slot removal button

Usage method:

1) The antenna interface of this product is SMA external rotation inner hole interface. 3G/4G antenna connection, 3G/4G antenna to be connected Rotate clockwise to connect to the 3G/4G antenna interface. Be sure to connect this antenna when using wireless internet.

2) WiFi antenna connection. The WiFi antenna to be connected is rotated clockwise to connect to the WiFi antenna interface. In order to ensure the optimal quality of WiFi signal to achieve the optimal transmission rate of the device, it is proposed to connect two WiFi antennas at the same time.

3) SIM plug-in, the equipment adopts external drawer type SIM card installation mode. When inserting cards, press hard with pins or cones Push the "PUSH" button to make the SIM card slot pop up. Place the SIM card in the slot according to the direction of identification (chip facing up). Inside, push in. When dialing the card, press the "PUSH" button, pop up the SIM card slot, and take out the SIM card.

4) The use of the R key. When the equipment is powered on, press the "R" key with a conical object, and the system lamp will be faster flashing after 5 seconds of long pressing. Subsequently, the equipment was restarted and the factory settings were restored.

5) Serial port use:

G N D	T X	R X	D C +
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From left to right, it is GND/TX/RX/DC+. For digital transmission, only GND/TX/RX is needed, respectively. Serial port communication can be established by connecting the 5 pin, 2 pin, and 3 pin of the serial port of the computer. DC+ is the power input and output interface. (eg: electricity 12V power supply at the source input, where the output is 12V, Or you can supply

power to the device by inputting voltage through this interface.)

1.2 Rear panel:



Rear panel interface description:

Name	Function
LAN2	Network port, Lan port
LAN1	Network port, Lan port or Wan port
DC 6-35V	Power supply

- 1) LAN1/LAN 2: Standard RJ45 interface; in the gateway mode, LAN1 can be used as WAN port, its connection types can be PPPOE, DHCP, static IP, etc.
- 2) DC power supply interface: 2.1mm round head power supply interface, positive inside and negative outside. The voltage input is 6-35V, and the power more than 10W.

Chapter 2 Connection Settings

2.1 Connecting devices

You can connect your computer and router by following the steps.

1. Set the computer's IP address description:

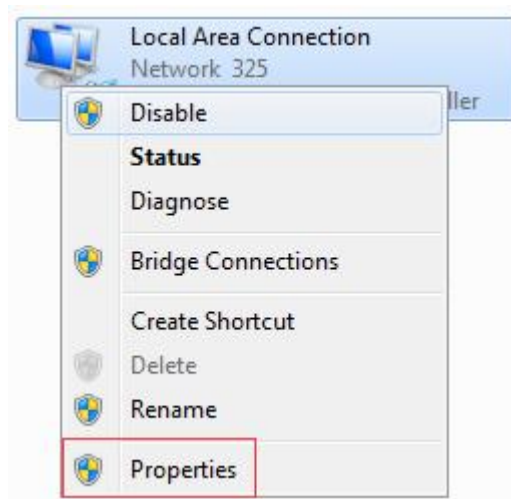
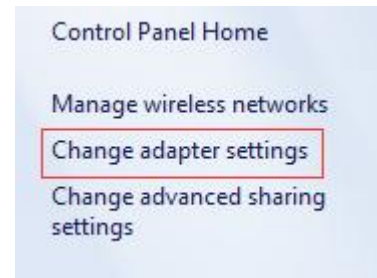
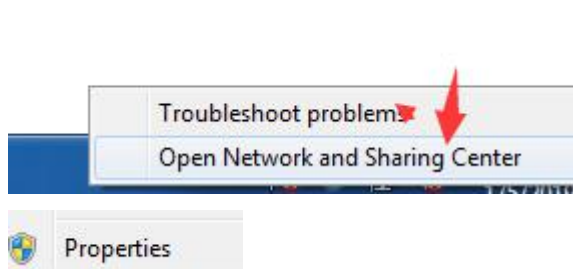
Before accessing the web settings page, it is recommended that you set your computer to "automatically obtain an IP address" and "automatically obtain a DNS server address". Automatically assign an IP address by the router. If you need to assign a static IP address to the computer, you need to set the IP address of the computer to the same subnet as the LAN port IP address of the router (the default IP address of the router's LAN port is 192.168.1.1, and the subnet mask is 255.255. .255.0).

2. IP address setting method:

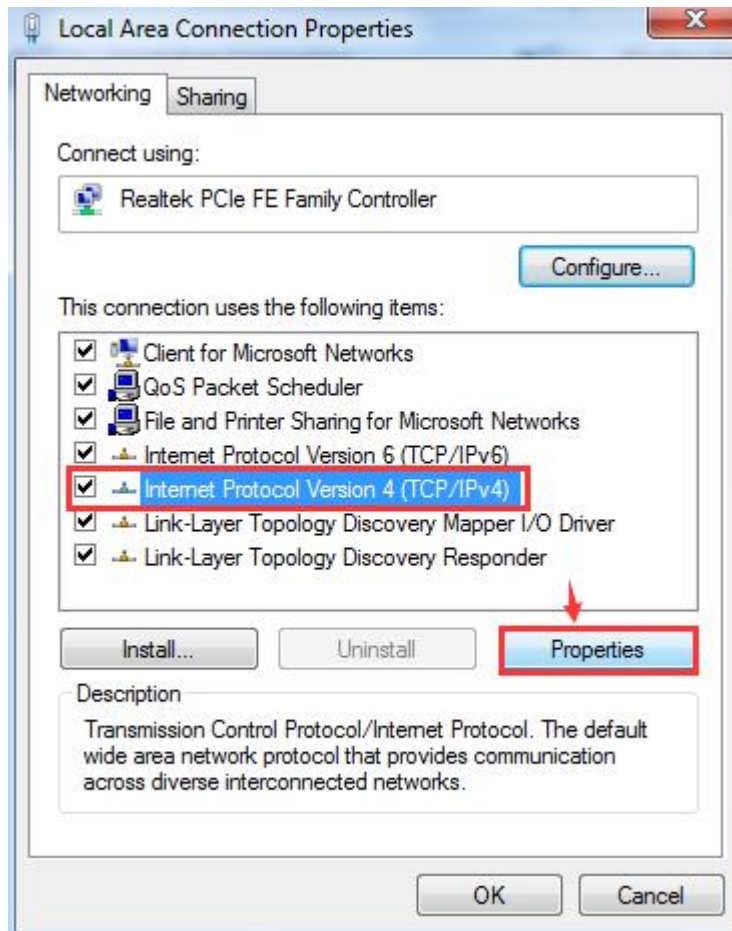
- 1). Right click on the network icon in the lower right corner of your computer's desktop.  or



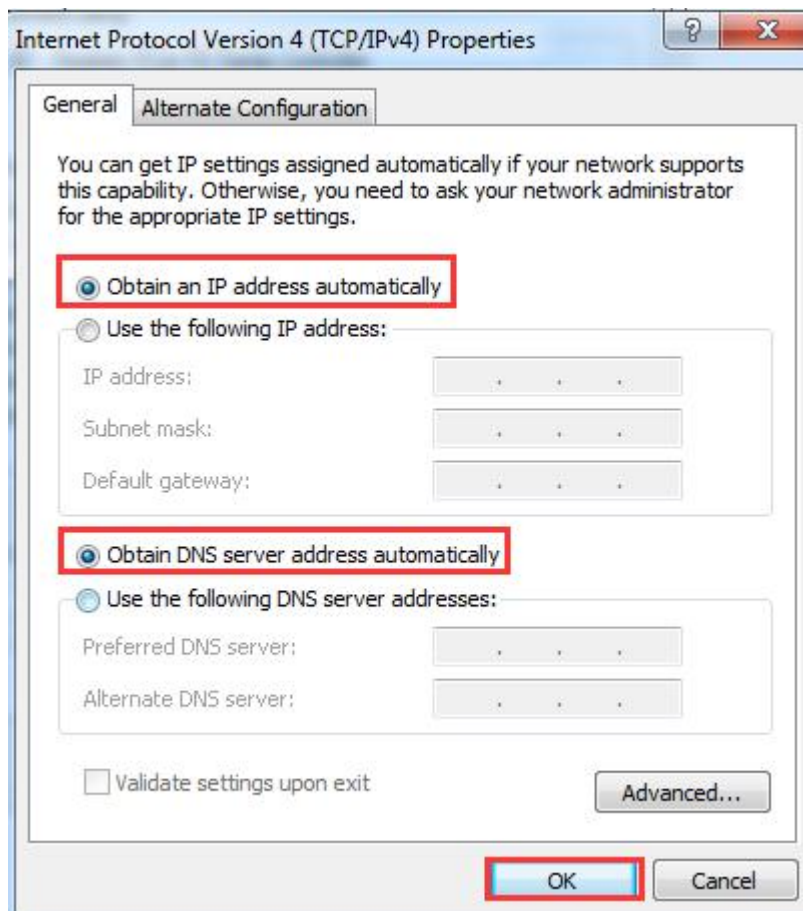
, Click "Open Network and Sharing Center", select "Change adapter settings" at left side, right click "Local Area Connection" after opening, select "Properties".



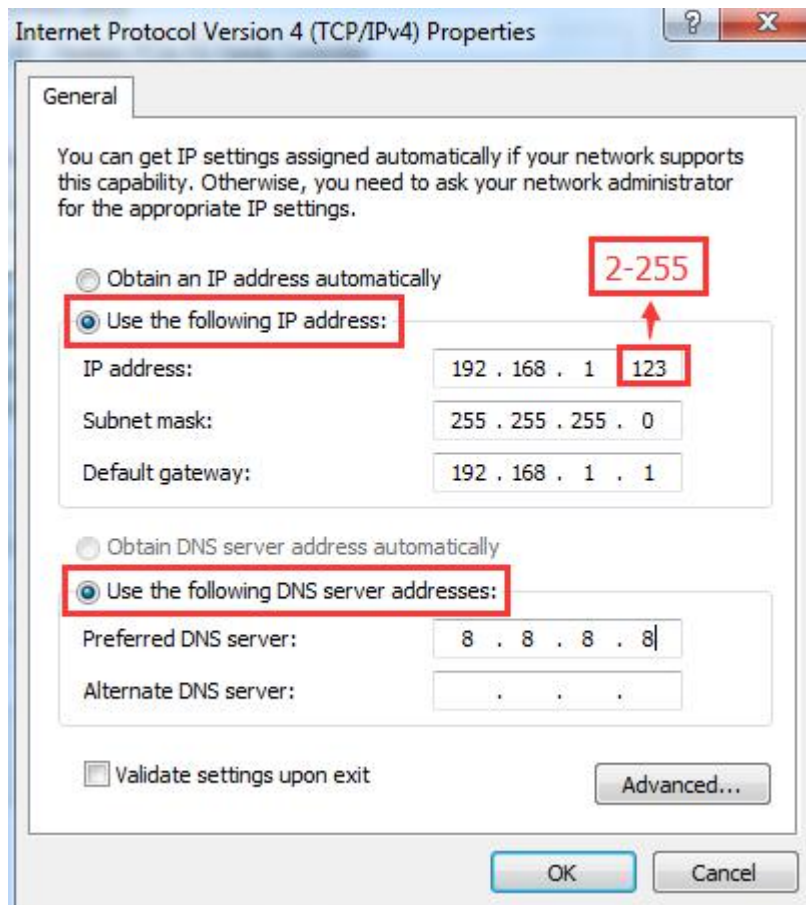
2) Double click "Internet Protocol Version 4 (TCP/IPv4)"



3) Select “Obtain an IP address automatically “ and “Obtain DNS server address automatically”, click”ok”. Return to the previous interface, click” OK”.



4) If you need to assign an IP address to your computer, you need to connect the IP address of your computer to the LAN port of your router. The IP address is set on the same network segment, router IP address is 192.168.1.1, then the IP address you specify needs to be between 192.168.1.2 and 192.168.1.255, can't be the same IP as router, a void IP conflicts.



1. Connect by WIFI:

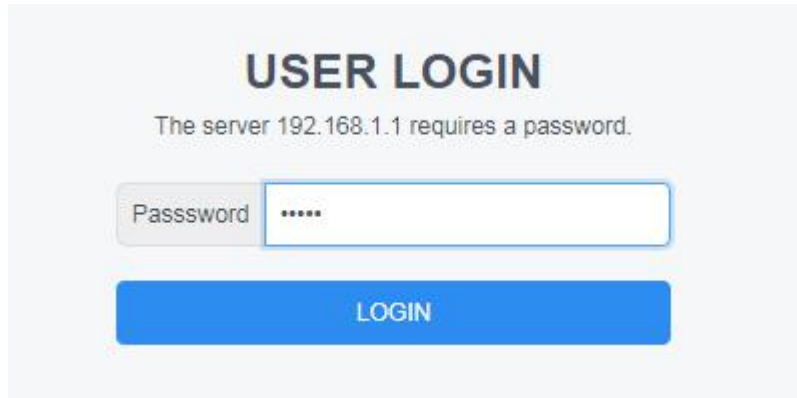
After the router starts normally, Click on the web icon , Detect wireless router's wireless network connection, find router's SSID, then click "connect" button establish connection, the wireless password defaults to 12345678.



4. Login router

Next you will be logged into the router web settings page. Enter "192.168.1.1" in the address bar of the web browser and enter the login user name and password in the pop-up box.

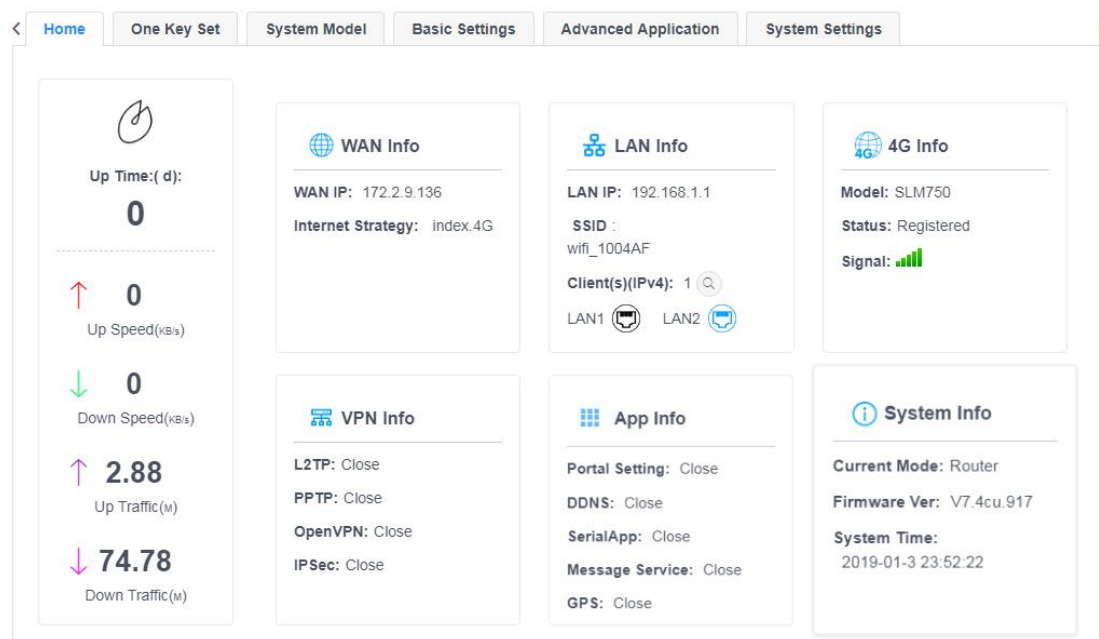
When you log in for the first time, please enter the default username: admin, password: admin.



The image shows the 'USER LOGIN' page of a router's web interface. At the top, it says 'The server 192.168.1.1 requires a password.' Below this is a 'Password' input field with a masked password '*****'. At the bottom is a blue 'LOGIN' button.

5. Go to the router web settings page

After logging in successfully, go to the web home page and you will see various information about the router. Click on the home option to see the details of each option, then you can set up and manage the router.



Chapter 3 Details Information

3.1: One button setting

This page shows two setup options:

Intranet setting: The information IP of this setting is the default IP of the router and no

modification is required.

Wireless Settings: The information for this setting is the router's default SSID name, and the default wireless password.

This page option is to make it easier for users to easily set up the router.

< Home One Key Set System Model Basic Settings Advanced Application System Settings >

This page is used to configure the parameters for Internet network and configure the basic items of the wireless network.

LAN

IP Address 192.168.1.1

Subnet Mask 255.255.255.0

Wireless Setting

Wireless Name(SSID) wifi_1004AF

Password *****

Apply

2. System mode

The WI600A system provides three modes of operation for switching, allowing the router to be used better in more environments.

1) In the gateway mode, the user can use the standard routing status and insert the mobile phone tariff card for 4G network use.

Home One Key Set System Model Basic Settings Advanced Application System Settings >

This page is used to change Operation Mode.

Gateway Mode Bridge Mode WISP Mode

In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and PCs in LAN ports share the same IP to ISP through WAN port. The connection type can be setup in WAN page by using PPPoE, DHCP client, Static IP.

Apply

2) Bridge mode

In this mode, the user can scan other routers in the vicinity through the signal of the router, and bridge the upper router to use the signal amplifier, which can enhance the wireless signal of the superior router and make the signal of the upper router cover a wider range.

Home One Key Set **System Model** Basic Settings Advanced Application System Settings >

This page is used to change Operation Mode.

Gateway Mode **Bridge Mode** WISP Mode

- 1 Operation Mode**
In this mode, you can extend the superior Wi-Fi signal by Repeater setting function under the Wireless column to increase the coverage of the wireless signal.
- 2 relayed AP**
Please select a list of sites that need to be relayed. Tip: Click the "Scan" button to search for the current AP site.
- 3 Apply**
If the upward AP is encrypted, please fill in the correct password and click "Connect"; If the upward AP is not encrypted, click "Connect" directly.

Next

3) WISP mode:

In this mode, the router can be used as a wireless repeater. This function can be used to relay the WIFI signal of the superior route. After the relay is completed, the WI600A is used as a standard router, and the signal of the superior route is used. The wireless card of the desktop host is used.

Home One Key Set **System Model** Basic Settings Advanced Application

This page is used to change Operation Mode.

Gateway Mode Bridge Mode **WISP Mode**

- ✓ Operation Mode**
In this mode, all ethernet ports are bridged together and the wireless client will connect to ISP access point. The NAT is enabled and PCs in ethernet ports share the same IP to ISP through wireless LAN.
- 2 relayed AP**
Please select a list of sites that need to be relayed. Tip: Click the "Scan" button to search for the current AP site.
- 3 Apply**

Scan 2.4G

Channel	Network Name(SID)	MAC Address	Encryption	Signal
4	QC-2.4	9c:a6:15:99:d1:5d	NONE	100
7	9M-2.4G	d8:c8:e9:66:50:70	WPA2PSK	100

3. the basic settings:

The WI600A system provides basic Internet access and setup options.

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Home

One Key Set

System Model

Basic Settings

Advanced Application

This page is used for the basic setup of external network, wireless and internal network.

WAN

Wireless

LAN

Internet Strategy

4G

The cable is preferred

4G

Wired

IP Address

Module Type

SLM750

4G Mode

Auto

Apply

1) There are 3 internet access strategies in the external network settings, which enable users to better select and set the network used. In the "Wired Priority" mode, the 4G network and wired settings PPPOE, DHCP, and static IP can use the Internet to access the Internet. The wired mode is used preferentially. After the wired network is disconnected, it automatically switches to the 4G Internet mode.

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[System Settings](#)

This page is used for the basic setup of external network, wireless and internal network.

[WAN](#)
[Wireless](#)
[LAN](#)

Internet Strategy: The cable is preferred

Detection address: 114.114.114.114
(Only allow IP address input)

Wired

Connection Type: Static IP DHCP PPPoE

User Name:

Password:

Special Type: None

Advanced Settings: ☐ Hidden

2), 3 kinds of Internet access mode in the "wired" mode PPPOE, DHCP, static IP, only wired Internet access in this mode, The network cable is inserted into the LAN1 network port, which is the WAN network port. Input parameters can be used.

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This page is used for the basic setup of external network, wireless and internal network.

[WAN](#)
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Internet Strategy: The cable is preferred

Detection address: 114.114.114.114
(Only allow IP address input)

Wired

Connection Type: Static IP DHCP PPPoE

User Name:

Password:

Special Type: None

Advanced Settings: ☐ Hidden

3), "4G" mode, divided into automatic and manual two ways. Insert a 3G/4G tariff card and the router will automatically recognize the 3G/4G network. You can also define the network

operators you need to choose.

< Home One Key Set System Model **Basic Settings** Advanced Application System Settings >

This page is used for the basic setup of external network, wireless and internal network.

WAN Wireless LAN

Internet Strategy 4G

IP Address 0.0.0.0

Module Type SLM750

4G Mode Auto

Auto

Manual Operation

Apply

4)"Wireless Settings" is the basic information of wireless WIFI. Users can set wireless name, wireless password, encryption method, encryption type and so on.

This page is used for the basic setup of external network, wireless and internal network.

[WAN](#)
[Wireless](#)
[LAN](#)

Wireless On/Off

On ☐

Wireless Name(SSID)

wifi_1004AF

Band

2.4 GHz (B+G+N)

Broadcast SSID

Enabled ☐

Region

China

Channel Bandwidth

40MHz

2.4G Channel

Auto

Encryption Mode

WPA/WPA2-PSK

Encryption Ttype

TKIP/AES

Password

12345678

Apply

There are several types of encryption methods. Each mode has different encryption types. You can select different security modes to set passwords as needed.

Region

China

Channel Bandwidth

40MHz

2.4G Channel

Auto

Encryption Mode

WPA/WPA2-PSK

Encryption Ttype

NONE

WPA-PSK

WPA2-PSK

WPA/WPA2-PSK

Password

5) "Intranet Settings" is the network information built into the router.

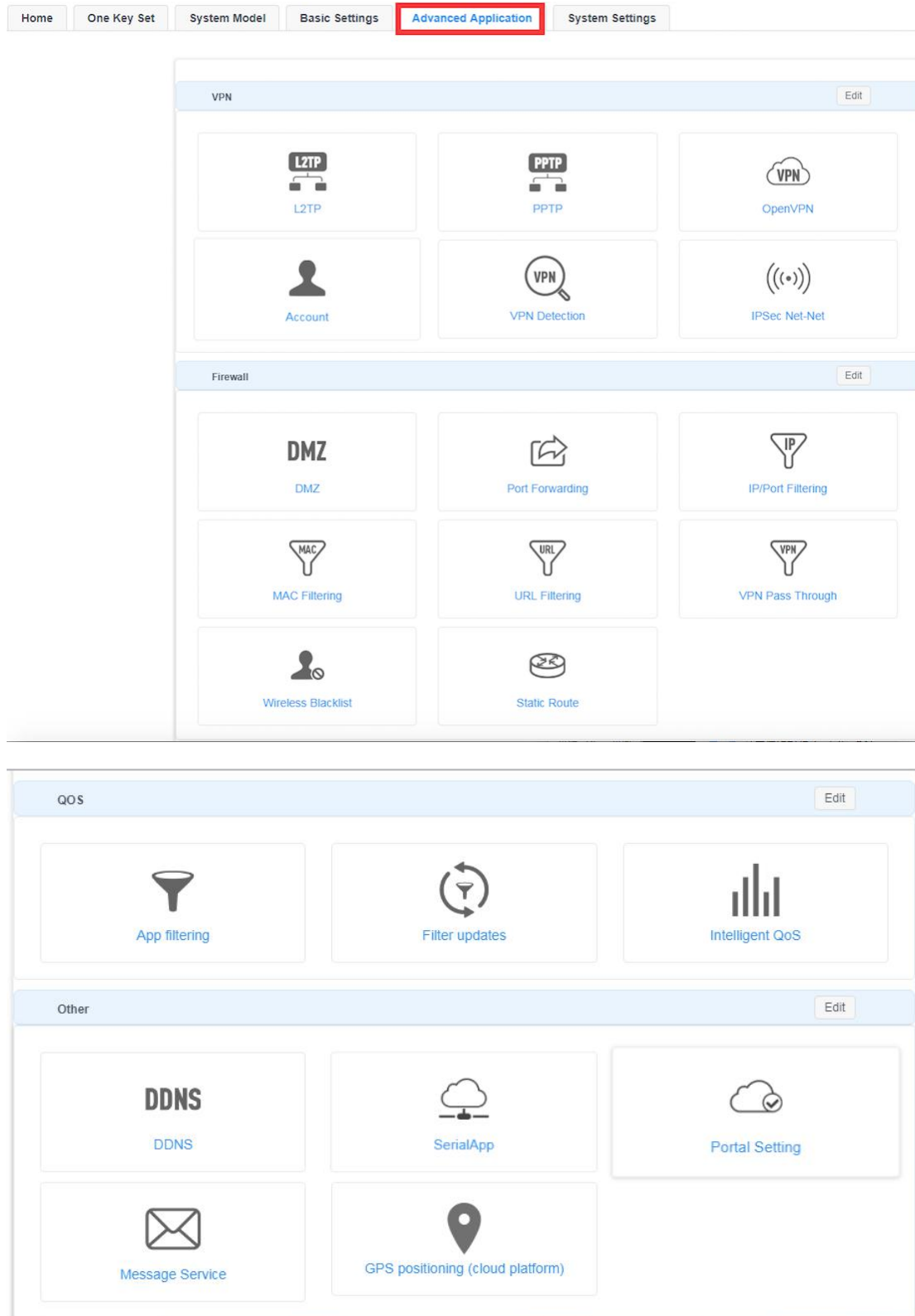
This page is used for the basic setup of external network, wireless and internal network.

WAN Wireless **LAN**

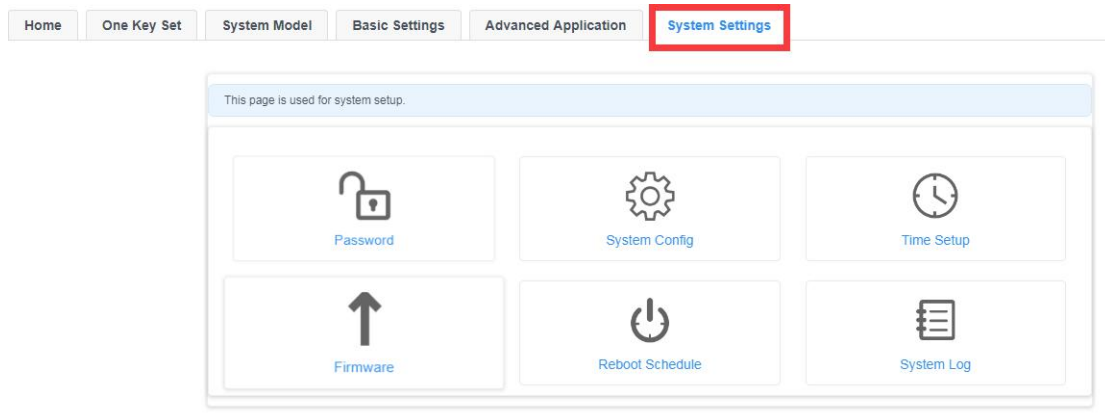
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	☒ On
DHCP Start IP Address	192.168.1.2
DHCP End IP Address	192.168.1.253
Lease Time	86400 (300-86400)s

4.advanced applications:

This setting is some of the advanced options in the router, VPN, firewall, QOS and some other applications.



5.system settings:



Users can use this page to modify the router management password, system restart, system recovery, software upgrade, time setting, view system log, router with timed restart function, users can set the restart time.