



# User Manual

---Apply to R200/R520 Industrial 3G/4G Router

V3.0

<http://www.wlink-tech.com>

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# 1

## Product Introduction

### 1.1 Product overview

Wlink industrial Router use industrial grade design, high-powered 32bit MIPS network processor, embedded industrial grade, high powered, multi-band frequency mobile 3G+ communication module, support WCDMA, HSPA+、TD/FDD-LTE、EVDO (CDMA 2000) etc., high-speed mobile, wide band, provide quick, convenient internet access or private network transmission to customer, optional built-in WI-FI module or multi-LAN port, provide wire-line network or wireless WLAN share high speed wide band access, meanwhile, customized high security VPN (Open VPN、IPSec、SSL), to construct safe channel, widely used in financial, electric power, environment, oil, transportation, security, etc..

Wlink industrial series router provide WEB GUI, optional CLI configuration interface, customer can configure only by IE explore or Telnet/SSH, various configuration method, concise and friendly interface make configuring and managing of all router terminal easier ,meanwhile, Wlink provide M2M terminal management platform to manage all router terminal with remote management. User can monitor all terminals which connected to platform successfully by this platform, provide long-distance control, parameter configuration, and long-distance upgrade service.

### 1.2 Model introduction

Wlink industrial grade router series have single module / single SIM card, single module / double SIM card, double module / double SIM card design, support multi-band frequency WCDMA, HSPA+, TD/FDD-LTE, EVDO (CDMA 2000) etc., mobile wide-band, downward compatibility to GPRS、EDGE、CDMA 1x, etc., mobile narrow-band, optional built-in Wi-Fi module to build WLAN network, optional GPS module Expansion positioning function, to suit different requirement and different network environment of different operator, our Router series have many model for option, below is the product model indications in detail, for more optional models, please consult local distributors /resellers.





Table 1-1 Router model table

Optional Model List							
Model	LTE 4G	3G	Interface	WiFi	GPS	DL	UL
WL-R200L	FDD LTE 2600/2100/1800/900/800MHz	UMTS 800/850/900/1900/2100MHz	1xLAN 1xWAN			100M	50M
WL-R200L-w	FDD LTE 2600/2100/1800/900/800MHz	UMTS 800/850/900/1900/2100MHz	1xLAN 1xWAN	✓		100M	50M
WL-R200L-g	FDD LTE 2600/2100/1800/900/800MHz	UMTS 800/850/900/1900/2100MHz	1xLAN 1xWAN		✓	100M	50M
WL-R200LZ	FDD LTE: 2600/2100/1900/1700/900//850/700MHz TDD LTE: B38	UMTS 2100/1900/850/900MHz	1xLAN 1xWAN			FDD:100M TDD:60M	FDD:50M TDD:60M
WL-R200LZ-w	FDD LTE: 2600/2100/1900/1700/900//850/700MHz TDD LTE: B38	UMTS 2100/1900/850/900MHz	1xLAN 1xWAN	✓		FDD:100M TDD:60M	FDD:50M TDD:60M
WL-R200LZ-g	FDD LTE: 2600/2100/1900/1700/900//850/700MHz TDD LTE: B38	UMTS 2100/1900/850/900MHz	1xLAN 1xWAN		✓	FDD:100M TDD:60M	FDD:50M TDD:60M
WL-R200H		HSPA+ 2100/1900/850MHz	1xLAN 1xWAN			21M	5.76M
WL-R200H-w		HSPA+ 2100/1900/850MHz	1xLAN 1xWAN	✓		21M	5.76M
WL-R200H-g		HSPA+ 2100/1900/850MHz	1xLAN 1xWAN		✓	21M	5.76M
WL-R200H2		HSPA 2100/1900/900/850MHz	1xLAN 1xWAN			14M	5.76M
WL-R200H2-w		HSPA 2100/1900/900/850MHz	1xLAN 1xWAN	✓		14M	5.76M
WL-R200H2-g		HSPA 2100/1900/900/850MHz	1xLAN 1xWAN		✓	14M	5.76M
WL-R200U		HSUPA 2100/1900/900/850MHz	1xLAN 1xWAN			7.2M	5.76M
WL-R200U-w		HSUPA 2100/1900/900/850MHz	1xLAN 1xWAN	✓		7.2M	5.76M
WL-R200U-g		HSUPA 2100/1900/900/850MHz	1xLAN 1xWAN		✓	7.2M	5.76M
WL-R200E		EVDO 800/MHz	1xLAN 1xWAN			3.1M	1.8M
WL-R200E-w		EVDO 800MHz	1xLAN 1xWAN	✓		3.1M	1.8M
WL-R200E-g		EVDO 800MHz	1xLAN 1xWAN		✓	3.1M	1.8M
<b>Note:</b> 1. If need Special frequency band, pls consult wlink sale person 2. Please specify before order if need VPN or OpenVPN							

Optional Model list								
Model	LTE	3G	Interface	Dual SIM	WiFi	GPS	DL	UL
WL-R520L	FDD LTE 2600/2100/1800/900/800MHz	UMTS 800/850/900/1900/2100MHz	4xLAN 1xWAN		✓		100M	50M
WL-R520L-d	FDD LTE 2600/2100/1800/900/800MHz	UMTS 800/850/900/1900/2100MHz	4xLAN 1xWAN	✓	✓		100M	50M
WL-R520L-g	FDD LTE 2600/2100/1800/900/800MHz	UMTS 800/850/900/1900/2100MHz	4xLAN 1xWAN		✓	✓	100M	50M
WL-R520LZ	FDD LTE: 2600/2100/1900/1700/900/850/700MHz TDD LTE: B338	UMTS 2100/1900/850/900MHz	4xLAN 1xWAN		✓		FDD:100M TDD: 60M	FDD:100M TDD: 60M
WL-R520LZ-d	FDD LTE: 2600/2100/1900/1700/900/850/700MHz TDD LTE: B38	UMTS 2100/1900/850/900MHz	4xLAN 1xWAN	✓	✓		FDD:100M TDD: 60M	FDD: 50M TDD: 60M
WL-R520LZ-g	FDD LTE: 2600/2100/1900/1700/900/850/700MHz TDD LTE: B40	UMTS 2100/1900/850/900MHz	4xLAN 1xWAN		✓	✓	FDD:100M TDD: 60M	FDD: 50M TDD: 60M
WL-R520H		HSPA+ 2100/1900/850MHz	4xLAN 1xWAN		✓		21M	5.76M
WL-R520H-d		HSPA+ 2100/1900/850MHz	4xLAN 1xWAN	✓	✓		21M	5.76M
WL-R520H-g		HSPA+ 2100/1900/850MHz	4xLAN 1xWAN		✓	✓	21M	5.76M
WL-R520H2		HSPA 2100/1900/900/850MHz	4xLAN 1xWAN		✓		14M	5.76M
WL-R520H2-d		HSPA 2100/1900/900/850MHz	4xLAN 1xWAN	✓	✓		14M	5.76M
WL-R520H2-g		HSPA 2100/1900/900/850MHz	4xLAN 1xWAN		✓	✓	14M	5.76M
WL-R520U		HSUPA 2100/1900/900/850MHz	4xLAN 1xWAN		✓		7.2M	5.76M
WL-R520U-d		HSUPA 2100/1900/900/850MHz	4xLAN 1xWAN	✓	✓		7.2M	5.76M
WL-R520U-g		HSUPA 2100/1900/900/850MHz	4xLAN 1xWAN		✓	✓	7.2M	5.76M
WL-R520E		EVDO 800MHz	4xLAN 1xWAN		✓		3.1M	1.8M
WL-R520E-d		EVDO 800MHz	4xLAN 1xWAN	✓	✓		3.1M	1.8M
WL-R520E-g		EVDO 800MHz	4xLAN 1xWAN		✓	✓	3.1M	1.8M
WL-R520E-dm		EVDO 800MHz HSPA+ 2100/1900/850MHz	4xLAN 1xWAN	Dual SIM Dual Module	✓		3.1M	1.8M
<b>Note:</b> 1. If need Dual module dual SIM, pls consult wlink sale person 2. If need Special frequency band, pls consult wlink sale person 3. Please specify before order if need VPN or OpenVPN								

## 1.3 Product Appearance

Table 1-2 Wlink Router Appearance

Series	R200	R200—W (G)	R520— (G)	R520—D
Appearance				
Ports	1*LAN 1*WAN	1*LAN + 1*WAN + GPS or WLAN(11n 1T1R)	1*WAN + 4*LAN + GPS or WLAN(11n 1T1R)	1*WAN + 4*LAN + single module/double SIM, double module/double SIM
Product category	Single port router	Single port Wi-Fi (GPS) router	Multi-port Wi-Fi router	multi-port double-link router

## 1.4 Typical Application Diagram

Wlink 4G/3G Router widely used in Telecom, economic, advertisement, traffic, environment protection business area.

For example, in economic area, R200 & R520 Series Router connect server by IPSec & GRE to ensure data security, tiny design makes it could installed into ATM machine. All these technology ensured safe and reliable data transmission, and minimize the probability of network disconnection, and maximize the usability of economic business like ATM, POS .etc.

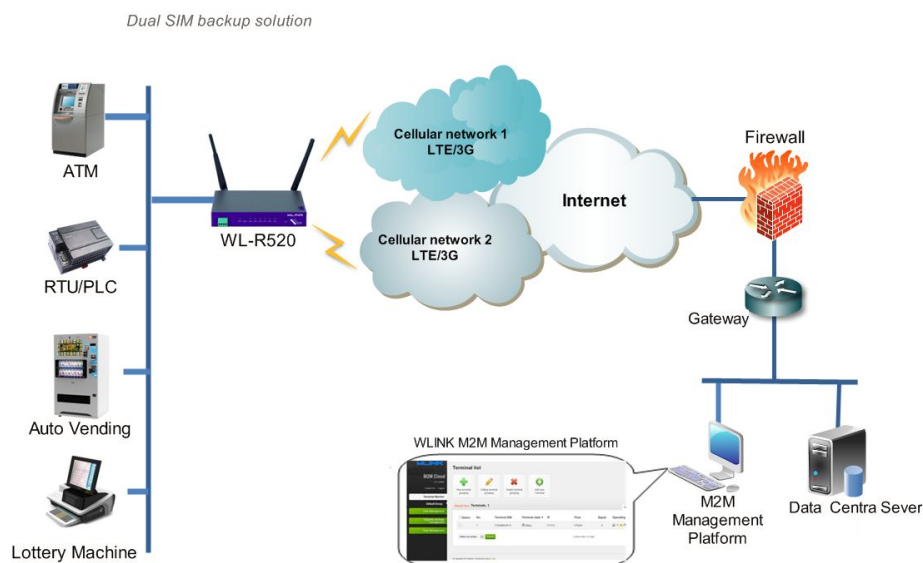




Figure 1-1 Network Topology

Wlink industrial router is based on mobile wireless public network or private network, build wireless data channel in mature network, to lower down the cost of wireless data transmission and technique.

## 1.5 Features

- Various cellular module optional, LTE/HSPA+/EVDO/CDMA2000 optional
- Support IEEE802.11b/g/n Wi-Fi AP function, extended support to Wi-Fi terminal, WDS bridging, support WEP, WPA/WPA2 Personal/Enterprise, TKIP/AES, etc., Authenticated encryption mode
- Support virtual data and private network (APN/VPDN)
- Optional support rs-232/rs-485 interface data transparent transmission and protocol conversion
- Support on-demand dialing, include timing on/off-line, voice or SMS control on/off-line, data trigger online or link idle offline
- Support TCP/IP protocol stack, support Telnet, HTTP, SNMP, PPP, PPPoE, etc., network protocol
- Support VPN Client (PPTP, L2TP), optional support Open VPN, IPSec, HTTPs, SSH, etc. advanced VPN function
- Provide friendly user interface, use normal web internet explorer to easily configure and manage, long-distance configure Telnet/SSH + CLI
- Optional IPv6 protocol stack
- Optional support M2M terminal management platform
- WDT watchdog design, keep system stable
- Customization as customer's demand

# 2 Hardware Installation

This chapter is mainly for installation introduction, there would be some difference between the scheme and real object. But the difference doesn't have any influence to products performance.

## 2.1 Panel:

Table 2-1 WLR200 -Structure

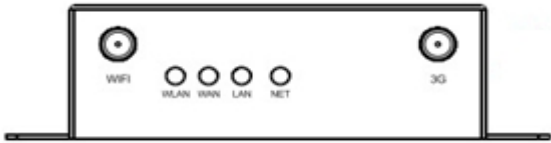
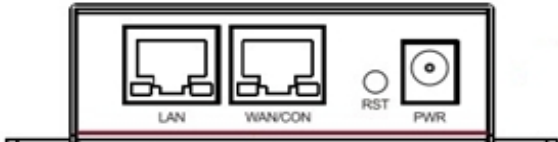
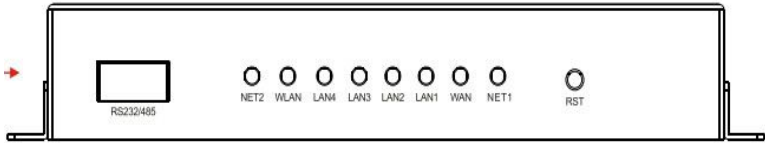
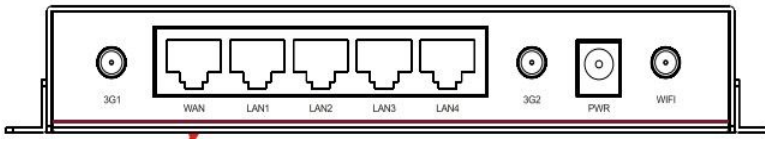
Wlink Tech.	R200 series
Front	
Rear	

Table 2-2 WL-R520 Structure

Wlink Tech.	R520 series
Front	
Rear	



There are some different for Antenna interface and indicator light for the expanded Wi-Fi, GPS series.

Table 2-3 Router Interface

Port	Instruction	Remark
USIM	Plug type SIM Slot, support 1.8/3V/5V automatic detection	
3G	3G antenna, SMA connector, 50Ω	
WiFi	Wi-Fi antenna, SMA connector, 50Ω	Optional
GPS	GPS antenna, SMA connector, 50Ω	Optional
LAN	10/100Base-TX, MDI/MDIX self-adaption,	R200: 1*LAN R520: 4*LAN
WAN	10/100Base-TX, MDI/MDIX self-adaption	R20 serial port and WAN port multiplex
RST	Reset button,(press on button 5 seconds)	
PWR	Power connector	5 ~ 26V DC
WAN/CON	Four pin serial port, suitable for collection device with RS-232 or RS-485 interface, for wireless data transmission, CON for debug test.	R20 serial port and WAN port multiplex

## 2.2 LED Status

Table 2-4 Router LED indicator Status

silk-screen	color	status	Indication
NET	Green	Blink	Strong Signal
	Orange	Blink	Normal Signal
	Red	Blink	Weak Signal
		Blinking slowly(2s)	Already login network or dialing online. LED color is matched with signal indication. For example, for strong signal, after login network or online, it will blink green light.
		Blinking quickly(0.5s)	Dialing
WLAN	Green	Solid light	WLAN port open, but no data sending.
	Green	Blinking quickly	Data is in transmitting

silk-screen	color	status	Indication
	Green	Dark	WLAN port isn't opened
LAN	Green	Solid light	connect ok
	Green	Blinking	Data Sending
	Green	Dark	Not connected



**NOTE**

There are some difference among the LED indicator of expanded Wi-Fi, GPS function and single module/double SIM, double module/double SIM series products.

## 2.3 Dimension

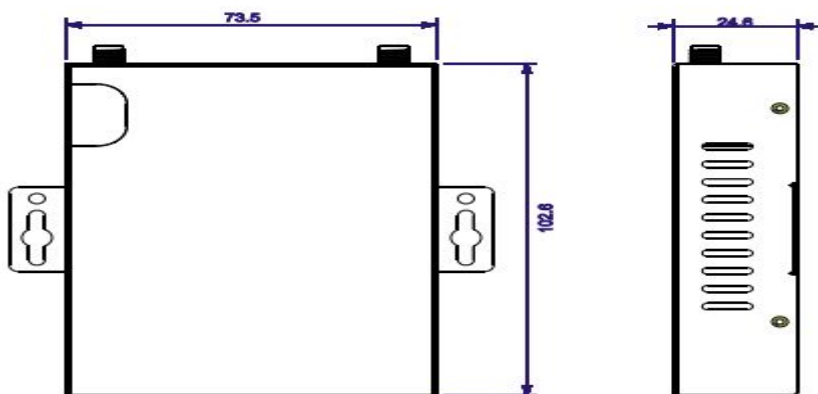


Figure 2-2 R200 Series Router Dimension Figure

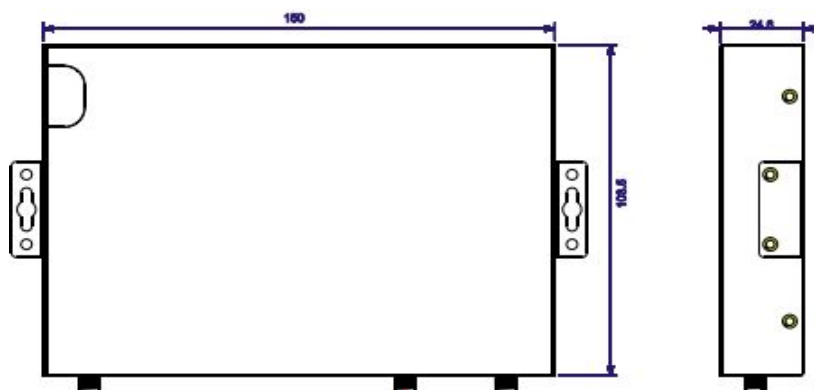


Figure 2-3 R520 Series Router Dimension Figure

## 2.4 How to Install

### 2.4.1 SIM/UM card install

If use dual SIM/UM card router, you may need insert dual SIM before configure it. After installation, please follow below steps to connect the router.



Before connecting, please disconnect any power resource of router

---

### 2.4.2 Ethernet Cable Connection

Use Ethernet cable connect the cellular Router and computer directly, or transfer by a switch.

### 2.4.3 Serial Port Connection

If you want to connect the router via serial port to laptop or other devices. To do this you need a serial port or RJ45 cable, this cable is optional. One end connect to computer serial port, other end connect the console port on the router



Before connecting, please disconnect any power resource of router

---

### 2.4.4 Power Supply

In order to get high reliability, Wlink Series Router adapt wide voltage input: +5V ~ +36VDC, support hot plug and complex application environment.

### 2.4.5 Review

After insert the SIM/UM card, connect Ethernet cable, necessary antenna, then connect power cable.



Please connect the antenna before connect the power cable, otherwise because of impedance mismatching, the signal maybe poor.

---

Notice:

- Step 1 Check antenna connection.
- Step 2 Check SIM/UM card, confirm SIM/UM card is available.
- Step 3 Power on the industrial Router

----END

# 3 Router Configuration

This Chapter introduces the parameter configuration of the router, the router can be configured via web internet explorer, or Firefox, chrome. We take GUIs 7 system and Internet Explorer 9.0 as sample.

## 3.1 Local Configure

The router supports configured by local Ethernet port, You could specify a static IP or DHCP get IP for your computer. The default IP address is 192.168.1.1, subnet mask is 255.255.255.0, please refer to followings:

Step 1 Click "start > control panel", find "Network Connections" icon and double click it to enter, select "Local Area Connection" corresponding to the network card on this page. Refer to the figure below.

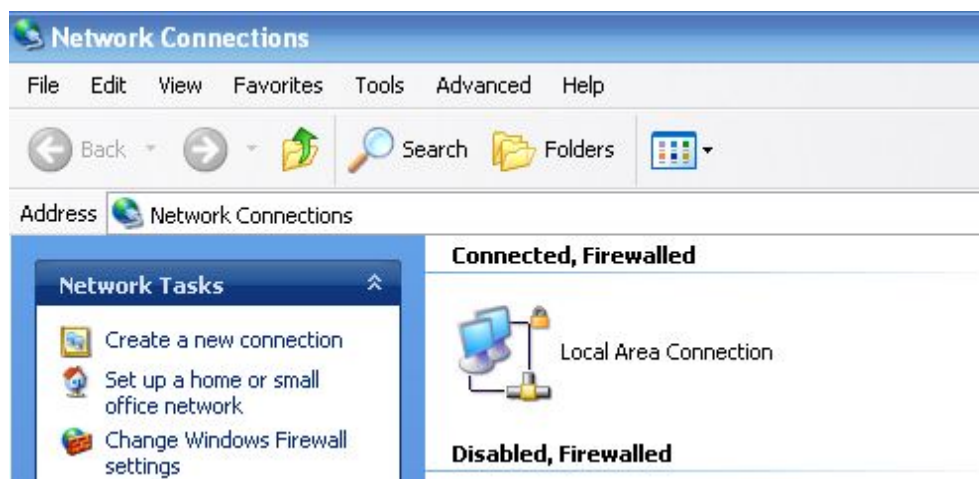


Figure 3-4 Network Connection

Step 2 Obtain a IP address automatically or set up IP address,192.168.1.xxx(XXX can be any number between2~254)

Step 3 Run a Internet Explorer and visit "<http://192.168.1.1/>", to enter identity page.

User should use default user name and password when log in for the first time



Figure 3-5 User Identify Interface

----END

## 3.2 Basic Configuration



NOTE

Different software version have different web configuration interface, below take R20 2.6.0.1 version as example.

After visit the WEB interface, you can check the current status of Router, or modify router's configuration via web interface, below is the introduction for the common setting.

**Status**

Overview

**LAN**

GPS

Device List

**Basic Network**

**WLAN**

**Advanced Network**

**VPN Tunnel**

**Administration**

**Debugging**

**Logout**

Router

### LAN

Router MAC Address	00:90:4C:06:E1:02
Router IP Addresses	192.168.1.1/24
DHCP	192.168.1.2 - 192.168.1.51

### Wireless (2.4 GHz / eth1)

MAC Address	00:90:4C:06:E1:04
Wireless Mode	Access Point
Wireless Network Mode	Auto
Interface Status	Up (LAN)
Radio	Enabled
SSID	router-wifi
Broadcast	Enabled
Security	-
Channel	6 - 2.437 GHz
Channel Width	40 MHz
Interference Level	Acceptable
Rate	150 Mbps

Enable
Disable

🔥 3 seconds Stop

Figure 3-6 Router Status GUI

## 3.2.1 Cellular Network Configure

Step 1 Single Click Basic Network-> Cellular, you can modify relevant parameter according to the application.

**Status**

**Basic Network**

**Cellular**

LAN

DDNS

Routing

**WLAN**

**Advanced Network**

**VPN Tunnel**

**Administration**

**Debugging**

**Logout**

Router

### Cellular Settings

Cellular Network Type: MC7710:WCDMA/HSPA+/FDD-LTE

Enable: ☒

ICMP Check: ☐

Cellular Traffic Check: ☐

DualSim Mode: Fail Over

SIM 1 Mode: LTE

SIM 1 APN: 3GNET

SIM 1 User: card

SIM 1 Password: \*\*\*\*

SIM 2 Mode: LTE

SIM 2 APN: CMNET

SIM 2 User: cmcc

SIM 2 Password: \*\*\*\*

Save Cancel



Figure 3-1 Cellular Settings GUI

Table 3-1 Cellular Setting Parameter Instruction

Parameter	Instruction
Enable	Enable SIM card dial
ICMP check	To enable or disable ICMP check rules. Enable the ICMP check and setup a reachable IP address as destination IP. Once ICMP check failed, router will switch SIM card.
SIM Mode	Select the network type
APN	APN, provided by local ISP, usually CDMA/EVDO network do not need this parameter
User	SIM card user name is provided by ISP
Password	SIM card password is provided by ISP



**NOTE** ICMP Check and Cellular Traffic Check is alternative.

#### 【ICMP Check】

Enable ICMP, Router will automatically check whether the defined IP address is reachable per 60s. If the IP address is unreachable and ICMP check is timeout at the first time, it will check 2 time as 3s interval. If the third time is still failed, the router will switch the SIM card.

The Check IP is an public IP or company server IP address.

#### 【Cellular Traffic Check】

【Check Mode】 there are Rx(receive), Tx(Transmission) and Rx/Tx check modes.

【Rx】Router will check the 3G/LTE cellular receiver traffic. If no receiver traffic within the defined check interval, the router will implement the specified action Reconnect or reboot.

#### 【SIM Mode】

【Fail Over】SIM card mutual backup. Once SIM card is failed, it will switch to the SIM2 and work on SIM2. Once SIM2 is failed, it will switch back to SIM1.

【SIM1 Only】Just SIM1 is available.

【SIM2 Only】 Just SIM2 is available.

【Backup】 SIM1 is the primary SIM. Once SIM1 is failed, it will switch to SIM2 and work on SIM2 within the defined time. Once the time is over, it will switch back to SIM1.

Step 2 After Setting, please click “save” icon.

----End

### 3.2.2 LAN Setting

Step 1 Single Click “ Basic Network>LAN”

Figure 3-2

Figure 3-3 LAN Setting GUI

Table 3-2 LAN Setting Instruction

parameter	Instruction
Router IP Address	Router IP address, default IP is 192.168.1.1
Subnet Mask	Router subnet mask, default mask is 255.255.255.0
DHCP	Dynamic allocation IP service, after enable it, it will show the IP address range and options of lease

parameter	Instruction
IP Address Range	IP address range within LAN
Lease	The valid time

Step 2 After setting, please click “save” to finish, the device will reboot.

**----End**

### 3.2.3 Dynamic DNS Setting

Step 1 Single click “ Basic Network->DDNS to open the DDNS setting GUI.

Figure 3-4 Dynamic DNS Setting

Table 3-3 DDNS Setting Instruction

parameter	Instruction
IP address	Default is standard DDNS protocol. for customized protocol, pls contact our engineer. Usually, use default IP 0.0.0.0
Auto refresh time	Set the interval of the DDNS client obtains new IP, suggest 240s or above
Service provider	Select the DDNS service provider that listed.

Step 2 Please Click “ Save “ to finish.

----End

## 3.3 WLAN Setting

It's mainly for router which support Wi-Fi, you can modify and configure WLAN parameter through Web GUI, below is the common setting

### 3.3.1 Basic Setting

Step 1 Click “WLAN->Basic Setting” to configure relative parameter

The screenshot displays the 'Wireless (2.4 GHz / eth1)' configuration page. On the left, a blue sidebar contains a navigation menu with options: Status, Basic Network, WLAN (highlighted), Basic Settings, Wireless Filter, Advanced Wireless, Wireless Survey, Advanced Network, VPN Tunnel, Administration, Debugging, and Logout. The main content area has a title bar 'Wireless (2.4 GHz / eth1)' and a 'Router' label. Below the title bar, various settings are listed: 'Enable Wireless' is checked; 'MAC Address' is 00:90:4C:06:E1:04; 'Wireless Mode' is set to 'Access Point'; 'Wireless Network Mode' is 'Auto'; 'SSID' is 'router-wifi'; 'Broadcast' is checked; 'Channel' is '6 - 2.437 GHz' with a 'Scan' button; 'Channel Width' is '40 MHz'; 'Control Sideband' is 'Upper'; and 'Security' is 'Disabled'. At the bottom right, there are 'Save' and 'Cancel' buttons.

Figure 3-5 WLAN Basic Settings GUI

Table 3-4 Basic Setting Instruction

Parameter	Instruction
Enable wireless	Enable or Disable the Wireless
Wireless mode	Support AP, AP+WDS, Bridge, Client, WDS
Wireless Network protocol	Support Auto, IEEE 11b/g/n selectable
SSID	The default is router, can be modified
Channel	The channel of wireless network, suggest keep the default
Channel Width	20MHZ and 40MHZ alternative
Security	Support various encryption method

Step 2 Please click "Save" to finish.

----End

### 3.3.2 Wireless Client Filter Setting

Step 1 Single click "WLAN > Wireless Filter".

Figure 3-6 Wireless Client Filter Setting GUI

The Wireless Filter enable to set the permitted client or prohibit the specific client to connect the WiFi, However, this feature is invalid for wired connection application.

Table 3-5 "Wireless Client Filter" Setting Instruction

Parameter	Instruction
Disable Filter	Choose to disable
Permit on the following client	Only allow the listed MAC address to connect to router by wireless
Block the follow Client	Prevent the listed MAC address to connect to router by wireless

Step 2 Please click "save" to finish

----End

## 3.4 Advanced Network Setting

### 3.4.1 Port Forwarding

Step 1 Please click "Advanced Network> Port Forwarding" to open the GUI, you may modify the router name, Host name and Domain name according to self requirement.

Status

Basic Network

WLAN

Advanced Network

Port Forwarding

DMZ

Triggered

Firewall

GPS

UPnP/NAT-PMP

Static DHCP

VPN Tunnel

Administration

Debugging

Logout

Router

### Port Forwarding

On	Proto	Src Address	Ext Ports	Int Port	Int Address	Description
<input type="checkbox"/>	UDP		1000,2000		192.168.1.2	ex: 1000 and 2000
<input type="checkbox"/>	Both		1000-2000,3000		192.168.1.2	ex: 1000 to 2000, and 3000
<input type="checkbox"/>	Both	1.1.1.0/24	1000-2000		192.168.1.2	ex: 1000 to 2000, restricted
<input type="checkbox"/>	TCP		1000	2000	192.168.1.2	ex: different internal port
<input checked="" type="checkbox"/>	TCP					

Add

- **Src Address** (optional) - Forward only if from this address. Ex: "1.2.3.4", "1.2.3.4 - 2.3.4.5", "1.2.3.0/24", "me.example.com".
- **Ext Ports** - The ports to be forwarded, as seen from the WAN. Ex: "2345", "200,300", "200-300,400".
- **Int Port** (optional) - The destination port inside the LAN. If blank, the destination port is the same as *Ext Ports*. Only one port per entry is supported when forwarding to a different internal port.
- **Int Address** - The destination address inside the LAN.

Save

Cancel

Figure 3-7 Port Forwarding GUI

Table 3-6 "Port Forwarding" Instruction

parameter	Instruction
Proto	Support UDP, TCP, both UDP and TCP
Src. Address	Source IP address. Forward only if from this address.
Ext. Ports	External ports. The ports to be forwarded, as seen from the WAN.
Int. Port	Internal port. The destination port inside the LAN. If blank, the destination port is the same as Ext Ports. Only one port per entry is supported when forwarding to a different internal port.
Int. Address	Internal Address. The destination address inside the LAN.
Description	

Step 2 Please click "save" to finished

----End

## 3.4.2 DMZ Setting

Step 1 Please click "Advanced Network> DMZ" to view or modify the relevant parameter.

Figure 3-8 DMZ GUI

Table 3-7 “DMZ” Instruction

parameter	Instruction
Destination Address	The destination address inside the LAN.
Source Address Restriction	If no IP address inside, it will allow all IP address to access. If define IP address, it will just allow the defined IP address to access.
Leave Remote Access	

Step 2 Please click “save” to finished

----End

### 3.4.3 Firewall Setting

Step 1 Please click “Advanced Network> Firewall” to view or modify the relevant parameter.



Figure 3-9 Firewall Setting GUI

Table 3-8 “Firewall” Instruction

parameter	Instruction
Applies To	White list.
Blocked Resources	Black list.

Step 2 Please click “save” to finished

### 3.4.4 GPS Setting

Step 1 Please click “Advanced Network> GPS” to view or modify the relevant parameter.

Figure 3-10 GPS Setting GUI

Table 3-9 “GPS” Instruction

parameter	Instruction
Bind Port	Local port for GPS data.
Server IP and Port	GPS server IP address and port.
Socket type	GPS data protocol.
Socket Timeout	The timeout for socket connection. If socket is not established, it will reconnect after the timeout time.
Serial Timeout	No serial port data, GPS module will send GPS data after the timeout time.
Packet Payload	The max packet for GPS data.
Heart-Beat Content	GPS heart beat packet.
Heart-Beat Interval	The heart beat packet interval.

Step 2 Please click “save” to finished



**NOTE**

GPS data format as below.

ID, time, data, Satellite numbers, longitude, N,latitude, E

e.g.

Router\_00001,083238,120313,12,2230.31563,N,11355.02863,E

## 3.5 VPN Tunnel

### 3.5.1 GRE Setting

Step 1 Please click “VPN Tunnel> GRE” to view or modify the relevant parameter.

Figure 3-11 GRE Setting GUI

Table 3-10 “GRE” Instruction

parameter	Instruction
Remote IP Address	GRE peer IP address. Usually a public IP address
Local IP Address	Local IP address for LAN.
Tunnel Local IP address	GRE Tunnel local IP address which is a virtual IP address.
Remote LAN IP Address	GRE Tunnel remotel IP address which is a virtual IP address.
ICMP Check IP Address	It's a reachable IP address. Once the ICMP check is failed, GRE will re-established.

Step 2 Please click "save" to finished.

## 3.5.2 VPN Client Setting

Step 1 Please click “VPN Tunnel> VPN Client” to view or modify the relevant parameter.

Table 3-11 “VPN Client” Instruction

parameter	Instruction
VPN Mode	VPN Mode for PPTP and L2TP
Server Address	VPN Server IP address.
Username	As the configuration requested.

parameter	Instruction
Password	As the configuration requested.
Encryption	As the configuration requested.
Stateless MPPE	As the configuration requested.
Accept DNS	As the configuration requested.
Remote Subnet	As the configuration requested.
Create NAT on Tunnel	As the configuration requested.

Step 2 Please click "save" to finished.

## 3.6 System Management

### 3.6.1 Identification

Step 1 Please click "Administrator> Identification" to open the GUI, you may modify the router name, Host name and Domain name according to self requirement.

Figure 3-12 Router Identification GUI

Table 3-12 "Router Identification" Instruction

parameter	Instruction
Router name	Default is router, can be set maximum 32 character
Host name	Default is router, can be set maximum 32 character
Domain name	Default is empty, support maximum up to 32 character, it is

parameter	Instruction
	the domain of WAN, no need to configure for most users.

Step 2 Please click "save" to finished

----End

## 3.6.2 Time configuration

Step 1 Please click “Administrator> time” to view or modify the relevant parameter.

Figure 3-13 System Configuration GUI



If the device is online but time update is fail, please try other NTP Time Server.

Step 2 Please click “save to finish.

----End

### 3.6.3 Admin Access Setting

Step 1 Please click “Administrator>Admin” to view and modify relevant parameter.

In this page, you can configure the basic web parameter, make it more convenient for usage. Please note the “password” is the router system account password.

Figure 3-14 Admin Setting GUI

Step 2 Please click save iron to finish the setting

----End

### 3.6.4 Backup Setting

Step 1 Please click “ Administrator> Back up Configuration ” to do the backup setting

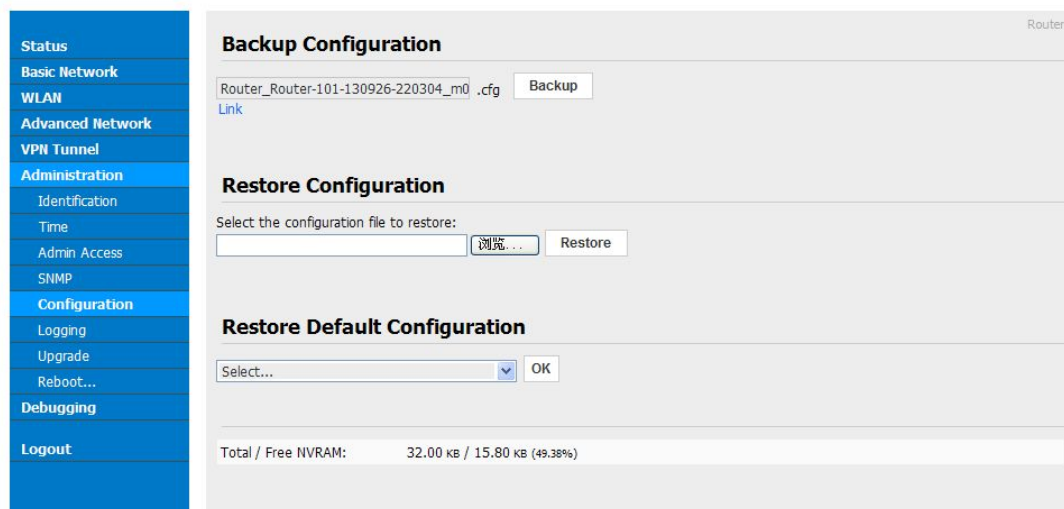


Figure 3-15 Backup and Restore Configuration GUI



CAUTION

Restore Default would be lose all configuration information, please be careful.

Step 2 After setting the backup and restore configuration. The system will reboot automatically.

----End



## 3.6.5 System Log Setting

Step 1 Please choose “Administrator> Logging” to start the configuration, you set the file path to save the log (Local or remote sever).

The screenshot shows the 'Syslog' configuration page in a web interface. On the left is a blue sidebar menu with options: Status, Basic Network, WLAN, Advanced Network, VPN Tunnel, Administration (highlighted), Identification, Time, Admin Access, SNMP, Configuration, Logging (selected), Upgrade, Reboot..., Debugging, and Logout. The main content area is titled 'Syslog' and has a 'Router' label in the top right corner. It contains several configuration sections: 'Log Internally' with a checked checkbox; 'Custom Log File Path' with an unchecked checkbox and a text field containing '/var/log/messages' with a note '(make sure the directory exists and is writable)'; 'Log To Remote System' with a checked checkbox; 'Host or IP Address / Port' with text fields for '192.168.1.2' and ': 514'; 'Generate Marker' with a dropdown menu set to 'Every 1 Hour'; and 'Limit' with a text field set to '60' and a note '(messages per minute / 0 for unlimited)'. At the bottom right are 'Save' and 'Cancel' buttons.

Figure 3-16 System log Setting GUI

Step 2 After configure, please click “Save” to finish.

----End

### 3.6.6 Firmware upgrade

Step 1 Please click “Administrator>firmware upgrade” to open upgrade firmware tab.

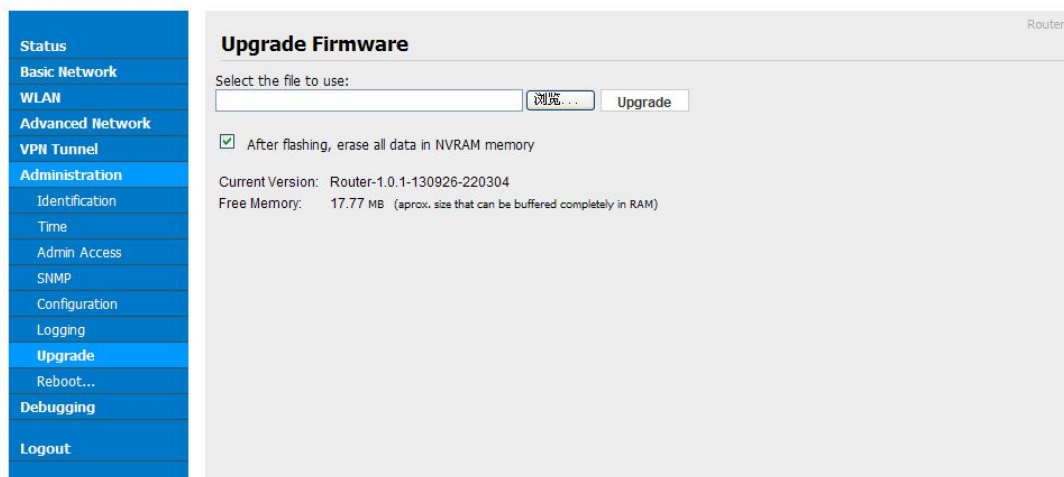


Figure 3-17 Firmware Upgrade GUI



#### NOTE

When upgrading, please don't cut off power of router.

### 3.6.7 System Reboot

Step 1 Please click “Administrator>Reboot” to restart the router. System will popup dialog to remind “Yes” or “NO” to carry out the operation.

Step 2 If choose “yes”, the system will restart, all relevant update configuration will be effective after reboot.

----End

### 3.7 “RST” Button for Restore Factory Setting

If you can't enter web interface because of other reasons, you also can use this way. For R200 Series, “RST” button is on the left of Ethernet port, for R520 Series, the button is on the left of NET light. This button can be used when the router is in use or when the router is turned on.

Press the “RST” button and keep more than 8 second till the NET light stopping blink. The system will be restored to factory.

Table 3-13 System Default Instruction

Parameter	Default setting
LAN IP	192.168.1.1
LAN Subnet Mask	255.255.255.0
DHCP server	Enable
User Name	admin
Password	admin



#### NOTE

After reboot, the previous configuration would be deleted and restore to factory settings.