



**Synway UMG Series Gateway**

**Uniway2200**

# **User Manual**

**Version 1.8.0**

**Synway Information Engineering Co., Ltd**

**[www.synway.net](http://www.synway.net)**

# Content

<b>Content .....</b>	<b>i</b>
<b>Copyright Declaration .....</b>	<b>iii</b>
<b>Revision History .....</b>	<b>iv</b>
<b>Chapter 1 Product Introduction .....</b>	<b>1</b>
1.1 Typical Application .....	1
1.2 Feature List.....	2
1.3 Hardware Description .....	2
1.3.1 Appearance & Interface Description .....	3
1.3.2 Hardware Structure .....	4
1.4 Alarm Info .....	5
<b>Chapter 2 Quick Guide .....</b>	<b>6</b>
<b>Chapter 3 WEB Configuration.....</b>	<b>8</b>
3.1 System Login .....	8
3.2 Operation Info .....	9
3.2.1 System Info .....	9
3.2.2 Board State.....	10
3.2.3 Warning Info .....	11
3.3 Gateway Setting .....	11
3.3.1 Board Setting.....	11
3.3.2 Board Information.....	12
3.4 Board Group .....	12
3.5 Route Settings .....	13
3.5.1 IP to TEL/PSTN Route .....	14
3.5.2 SIP Trunk.....	16
3.6 System Tools .....	16
3.6.1 Network .....	18
3.6.2 Management .....	19
3.6.3 IP Routing Table .....	21
3.6.4 Access Control .....	22
3.6.5 Centralized Manage .....	23
3.6.6 Configuration File .....	25
3.6.7 Signaling Capture.....	26
3.6.8 PING Test.....	27
3.6.9 TRACERT Test.....	28
3.6.10 Modification Record .....	29
3.6.11 Backup & Upload .....	30
3.6.12 Factory Reset.....	30
3.6.13 Upgrade.....	30
3.6.14 Account Manage .....	31
3.6.15 Change Password.....	32
3.6.16 Restart.....	33

<b>Appendix A Technical Specifications .....</b>	<b>34</b>
<b>Appendix B Troubleshooting .....</b>	<b>35</b>
<b>Appendix C Technical/sales Support .....</b>	<b>36</b>

# Copyright Declaration

All rights reserved; no part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, without prior written permission from Synway Information Engineering Co., Ltd (hereinafter referred to as 'Synway').

Synway reserves all rights to modify this document without prior notice. Please contact Synway for the latest version of this document before placing an order.

Synway has made every effort to ensure the accuracy of this document but does not guarantee the absence of errors. Moreover, Synway assumes no responsibility in obtaining permission and authorization of any third party patent, copyright or product involved in relation to the use of this document.

## Revision History

Version	Date	Comments
Version 1.6.3	2017-3	Initial publication
Version 1.8.0	2020.03	New revision

**Note:** Please visit our website <http://www.synway.net> to obtain the latest version of this document.

# Chapter 1 Product Introduction

Thank you for choosing Synway UMG Series Gateway!

The Synway UMG series gateway products (hereinafter referred to as 'UMG gateway') integrate the analog and digital subboards. It can connect the traditional phone sets, the fax machines, PSTN and the enterprise PBX as well as RoIP and the mixer to implement multiple features of analog and digital gateways, providing a powerful, reliable and cost-effective VoIP solution for such occasions as IP call centers and multi-branch agencies.

## 1.1 Typical Application

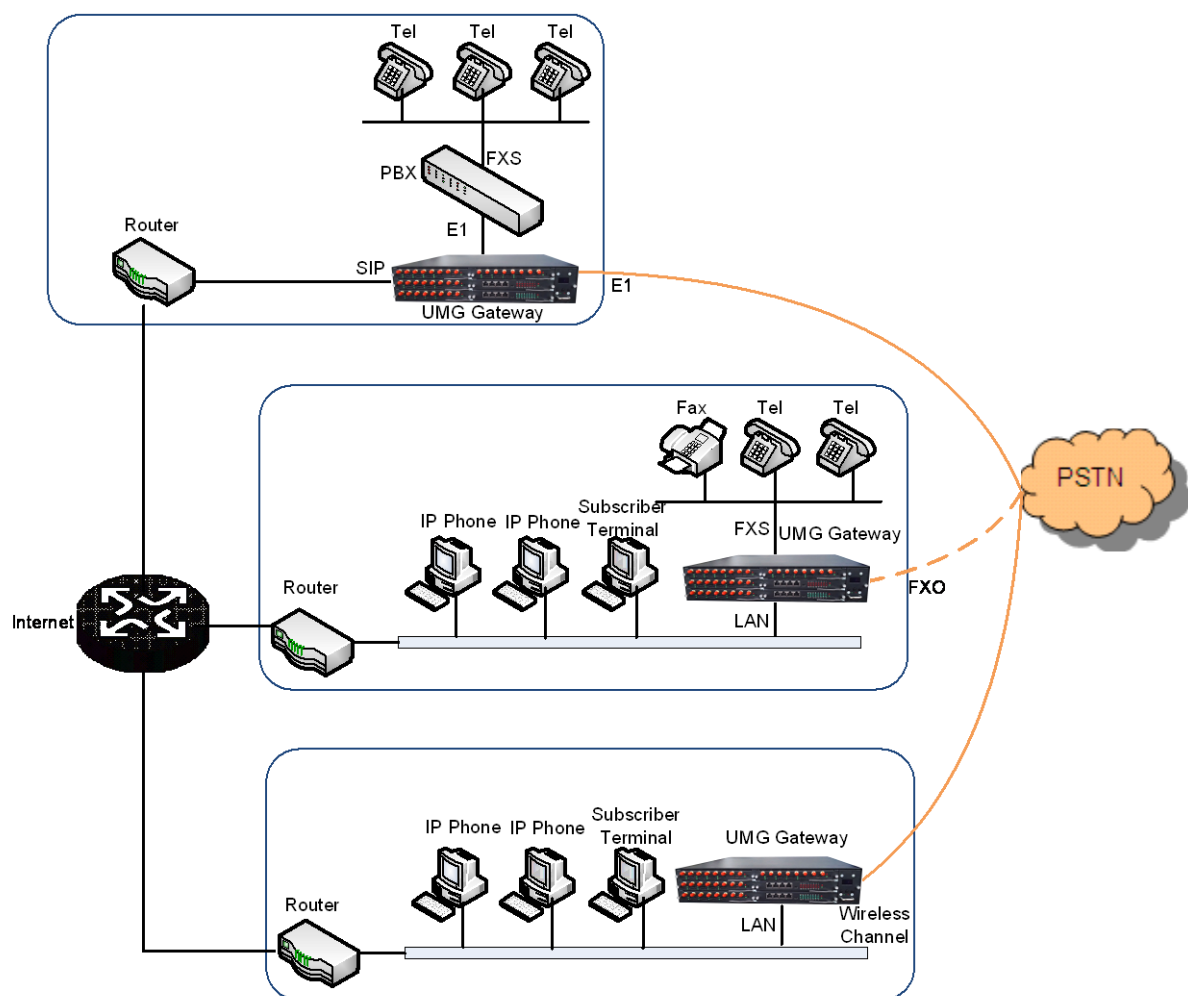


Figure 1-1 Typical Application

## 1.2 Feature List

Basic Features	Description	
<b>IP Call</b>	Call initiated from IP to a designated SIP trunk for voice communication, via routing and number manipulation.	
<b>Number Manipulation</b>	Peels off some digits of a phone number from left/right, or adds a prefix/suffix to a phone number.	
<b>VoIP Routing</b>	Routing path: from IP to PSTN or from PSTN to IP.	
<b>Fax</b>	Multiple fax parameters: fax mode, maximum fax rate, fax train mode, error correction mode, etc.	
<b>Echo Cancellation</b>	Provides the echo cancellation feature for a call conversation.	
<b>IMS Network</b>	Registers the gateway to a server under IMS network.	
<b>Simultaneous Register to Multiple Servers</b>	Registers the gateway to a master registrar server and a spare registrar server simultaneously.	
Signaling & Protocol	Description	
<b>SIP Signaling</b>	Supported protocol: SIP V1.0/2.0, RFC3261	
<b>Voice</b>	CODEC	G.711A, G.711U, G.729, G723, G722, AMR, iLBC
	DTMF Mode	RFC2833, SIP INFO, INBAND, RFC2833+Signaling, In-band+Signaling
Network	Description	
<b>Network Protocol</b>	Supported protocol: TCP/UDP, HTTP, ARP/RARP, DNS, NTP, TFTP, TELNET, STUN	
<b>Static IP</b>	IP address modification support	
<b>DNS</b>	Domain Name Service support	
Security	Description	
<b>Admin Authentication</b>	Support admin authentication to guarantee the resource and data security	
Maintain & Upgrade	Description	
<b>WEB Configuration</b>	Support of configurations through the WEB user interface	
<b>Language</b>	Chinese, English	
<b>Software Upgrade</b>	Support of user interface, gateway service, kernel and firmware upgrades based on WEB	
<b>Tracking Test</b>	Support of Ping and Tracert tests based on WEB	
<b>SysLog Type</b>	Three options available: ERROR, WARNING, INFO	

## 1.3 Hardware Description

The UMG gateway features 2U rackmount design and integrates embedded LINUX system within

the POWERPC+DSP hardware architecture. It has 2 Megabit Ethernet ports (LAN1 and LAN2) on the chassis, two fan boxes with removable fans and independent air passages respectively on the front and back panels.

### 1.3.1 Appearance & Interface Description



Figure 1-2 Front View for Uniway2200

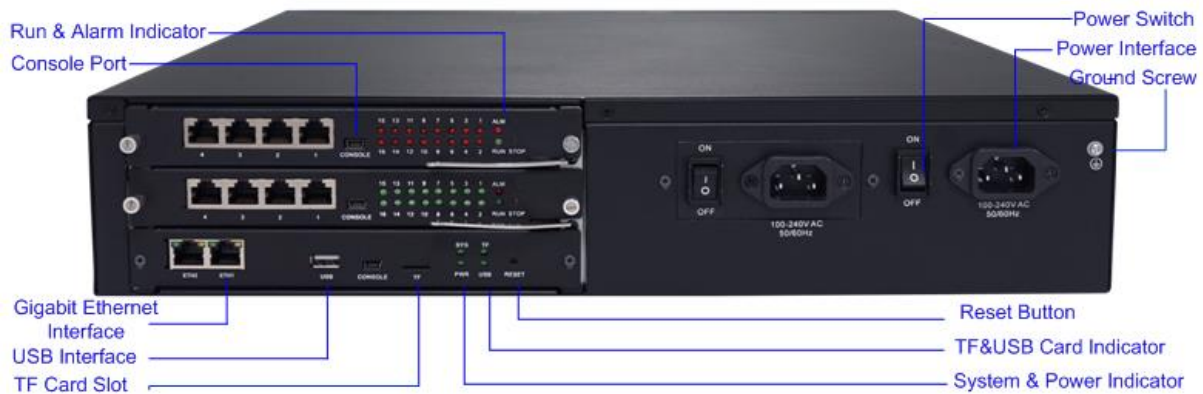


Figure 1-3 Rear View for Uniway2200



Figure 1-4 Left View for Uniway2200

The table below gives a detailed introduction to the interfaces, buttons and LEDs illustrated above:

Interface	Description
<b>LAN</b>	Amount: 2
	Type: RJ-45
	Bandwidth: 10/100Mbps
	Self-Adaptive Bandwidth Supported
	Auto MDI/MDIX Supported
<b>Console Port</b>	Amount: 1
	Type: RS-232



	Baud Rate: 115200 bps
	Connector: Mini-USB connecting line
	Data Bits: 8 bits
	Stop Bit: 1 bit
	Parity Unsupported
	Flow Control Unsupported
Button	Description
<b>Power Key</b>	The power key for the board power supply
<b>Reset Button</b>	Restore the gateway to factory settings.
LED	Description
<b>Power Indicator</b>	Indicates the power state. It lights up when the gateway starts up with the power cord well connected.
<b>Run Indicator</b>	Indicates the running status. For more details, refer to <a href="#">Alarm Info.</a>
<b>Alarm Indicator</b>	Alarms the device malfunction. For more details, refer to <a href="#">Alarm Info.</a>
<b>Link Indicator</b>	The green LED on the left of LAN, indicating the network connection status.
<b>ACT Indicator</b>	The orange LED on the right of LAN, whose flashing tells data are being transmitted.

### 1.3.2 Hardware Structure

The UMG gateway features 2U rackmount design, which can be inserted with the CPU board, the switching board, analog gateway subboards, digital gateway subboards, AU and EM subboards. For the UNIWAY2200 gateway, there are 6 service board slots in the front, 2 service board slots together with 1 switching board slot at the back. The wider one among the 9 slots is only for the switching board, and the other 8 slots are optional. The descriptions about the subboards are listed below:

The CPU board (Occupied a height of two service boards) based on the X86 architecture is used to run the IVR and other programs developed by customers.

The switching board for Uniway2200 has 2 independent Kilomega-Ethernet ports. It provides a high-performance, embedded CPU to manage all the devices, and all service boards interact with the outside through it.

The digital gateway subboards (UMG3000) support 1E1, 2E1s and 4E1s, with the type of UMG3000-B1, UMG-3000-B2 and UMG3000-B4.

The analog gateway subboards (UMG1000) now support up to 16 analog channels, with the types of UMG1000-D16S (16-channel FXS), UMG1000-D8S8O (8-channel FXS and 8-channel FXO) and UMG1000-D16O (16-channel FXO), UMG1000-D4EM (4-channel RoIP), UMG1000-D4AU (4-channel Mixer).

The 8 optional slots on Uniway2200 can be inserted with any subboards according to your requirement. The common settings are: 1 CPU board + 1 switching board + 6 available service boards; 2 CPU boards + 1 switching board + 4 available service boards; 1 switching board + 8 available service boards.

See the hardware architecture below:

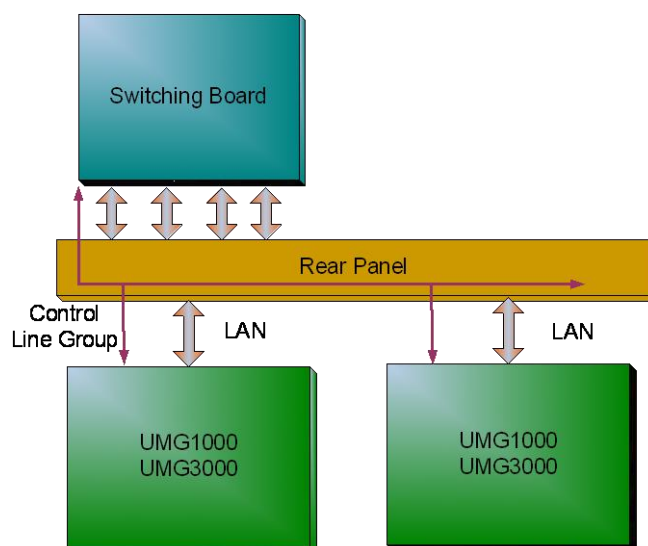


Figure 1-5 UMG Gateway Hardware Architecture

## 1.4 Alarm Info

The UMG gateway UNIWAY2200 is equipped only one indicator denoting the system's running status: System Indicator (green). The table below explains the states and meanings of the indicators.

LED	State	Description
<b>Run Indicator</b>	Go out	System is not yet started.
	Light up and flash fast	System is starting.
	Flash slowly	System is normal.
<b>Alarm Indicator</b>	Go out	System is normal.
	Light up	Upon startup: System is normal. In runtime: System is abnormal.
	Flash	System is abnormal.
<b>System Indicator</b>	Go out	System is not yet started.
	Light up and flash fast	Upon startup: System is normal. In runtime: System is abnormal.
	Flash slowly	System is normal.

### Note:

- The startup process consists of two stages: System Booting and Gateway Service Startup. For UNIWAY2200, after the system boots up successfully, the system indicator will flash fast during the gateway service startup process. Then after the service is successfully started and the device begins to work normally, the system indicator will turn to a slow flash.
- During runtime, if the alarm indicator lights up or flashes, it indicates that the device goes abnormal. If you cannot figure out and solve the problem by yourself, please contact our technicians for help. Go to [Appendix C Technical/sales Support](#) to find the contact way.

## Chapter 2 Quick Guide

This chapter is intended to help you grasp the basic operations of the UMG gateway in the shortest time.

### Step 1: Confirm that your packing box contains all the following things.

- UMG Gateway \*1
- Angle Bracket \*2, Rubber Foot Pad \*4, Screw for Angle Bracket \*8
- 220V Power Cord \*2
- Warranty Card \*1
- Installation Manual \*1

### Step 2: Properly fix the UMG gateway.

If you do not need to place the gateway on the rack, simply fix the 4 rubber foot pads. Otherwise, you should first fix the 2 angle brackets onto the chassis and then place the chassis on the rack.

### Step 3: Connect the power cord.

Make sure the device is well grounded before you connect the power cord. Check if the power socket has the ground wire.

**Note:** UNIWAY2200 has two power interfaces to meet the requirement for power supply hot backup. As long as you properly connect and turn on these two power keys, either power supply can guarantee the normal operation of the gateway even if the other fails.

### Step 4: Connect the network cable.

### Step 5: Log in the gateway.

Enter the original IP address of the UMG gateway (Uniway2200 ETH1: 192.168.1.101; or Uniway2200 ETH2: 192.168.0.101) in the browser to go to the WEB interface. The original username and password of the gateway are both 'admin'. For detailed instructions about login, refer to [System Login](#). We suggest you change the initial username and password via 'System Tools → Change Password' on the WEB interface as soon as possible after your first login. For detailed instructions about changing the password, refer to [Change Password](#). After changing the password, you are required to log in again.

### Step 6: Modify IP address of the gateway.

You can modify the IP address of the gateway via 'System Tools → Network' on the WEB interface to put it within your company's LAN. Refer to [Network](#) for detailed instructions about IP modification. After changing the IP address, you shall log in the gateway again using your new IP address.

### Step 7: Check the connection of subboards.

After the gateway starts successfully with the subboards, you can go 'Gateway→Subboard Gateway' on the WEB interface to check if all the subboards are well connected.

### Step 8: Set routing rules for calls.

Go to the route setting interface of each subboard to set the routing rules. Please refer to the user manual of each gateway for detailed information.

### Special Instructions:

- The chassis of the UMG gateway must be grounded for safety reasons, according to standard industry requirements. A simple way is earthing with the third pin on the plug.

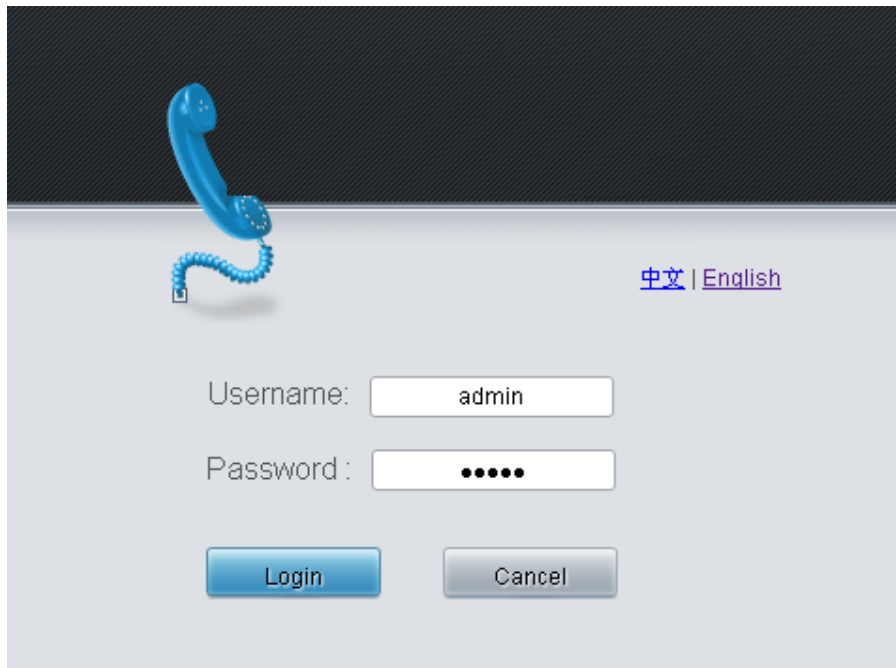
No or improper grounding may cause instability in operation as well as decrease in lightning resistance.

- As the device will gradually heat up while being used, please maintain good ventilation to prevent sudden failure, ensuring that the ventilation holes (see 错误!未找到引用源。) are never jammed.
- During runtime, if the alarm indicator lights up or flashes, it indicates that the device goes abnormal. If you cannot figure out and solve the problem by yourself, please contact our technicians for help. Otherwise it may lead to a drop in performance or unexpected errors.

## Chapter 3 WEB Configuration

### 3.1 System Login

Type the IP address into the browser and enter the login interface. See Figure 3-1.



The login interface features a blue telephone handset icon on the left. On the right, there are links for '中文' and 'English'. The main area contains two input fields: 'Username:' with the value 'admin' and 'Password:' with masked characters '•••••'. Below these fields are two buttons: 'Login' and 'Cancel'.

Figure 3-1 Login Interface

The gateway only serves one user, whose original username and password are both 'admin'. You can change the username and the password via 'System Tools → Change Password' on the WEB interface. For detailed instructions, refer to [Change Password](#).

After login, you can see the main interface as below.



The main interface shows a sidebar on the left with navigation options: Operation Info, System Info (selected), Board State, Analog Channel State, Analog Call Count, Analog SIP Count, Warning Info, Gateway Set, Board Group, Route, and System Tools. The main content area displays 'System Info' with details for LAN 1 and LAN 2, including MAC Address, IP Address, DNS Server, Receive/Transmit Packets, Current Speed, Work Mode, and Network Type. It also shows Runtime (20h 39m 27s), Current Version (1.8.0\_2021122915), Serial Number (4081), and Kernel information. At the bottom, there are 'Refresh' and 'Detailed Version' buttons.

System Info			
<b>LAN 1</b>			
MAC Address	00:00:E0:A8:02:15		
IP Address	172.16.30.175	255.255.255.0	172.16.30.254
DNS Server	0.0.0.0		
Receive Packets	All:5530425	Error:0	Drop:0
Transmit Packets	All:190484	Error:0	Drop:0
Current Speed	Receive:4.7 KB/s	Transmit:7.8 KB/s	
Work Mode	100Mb/s Full Duplex		
Network Type	Static		
<b>LAN 2</b>			
MAC Address	00:00:E0:A8:02:15		
IP Address	192.168.0.101	255.255.255.0	192.168.0.254
DNS Server	0.0.0.0		
Receive Packets	All:0	Error:0	Drop:0
Transmit Packets	All:10	Error:0	Drop:0
Current Speed	Receive:0 B/s	Transmit:0 B/s	
Work Mode	Disconnected		
Network Type	Static		
Runtime	20h 39m 27s		
Current Version	1.8.0_2021122915		
Serial Number	4081 (uniway2200)		
WEB	1.8.0_2021122915		
Gateway	1.8.0_2021122915		
Uboot	1.2.5_201810		
Kernel	#244 SMP PREEMPT Sat Sep 18 09:05:11 CST 2021		

Figure 3-2 Main Interface

## 3.2 Operation Info

Operation Info shows the current running status of the gateway. See Figure 3-3.

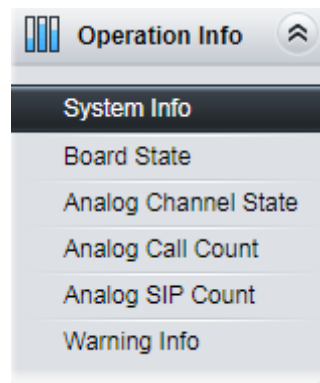


Figure 3-3 Operation Info

### 3.2.1 System Info

System Info			
<b>LAN 1</b>			
MAC Address	00:00:E0:A8:02:15		
IP Address	172.16.30.175	255.255.255.0	172.16.30.254
DNS Server	0.0.0.0		
Receive Packets	All:5534342	Error:0	Drop:0
Transmit Packets	All:191576	Error:0	Drop:0
Current Speed	Receive:4.9 KB/s	Transmit:11.8 KB/s	
Work Mode	100Mb/s Full Duplex		
Network Type	Static		
<b>LAN 2</b>			
MAC Address	00:00:E0:A8:02:15		
IP Address	192.168.0.101	255.255.255.0	192.168.0.254
DNS Server	0.0.0.0		
Receive Packets	All:0	Error:0	Drop:0
Transmit Packets	All:10	Error:0	Drop:0
Current Speed	Receive:0 B/s	Transmit:0 B/s	
Work Mode	Disconnected		
Network Type	Static		
Runtime	20h 40m 11s		
Current Version			
Serial Number	4081 (uniway2200)		
WEB	1.8.0_2021122915		
Gateway	1.8.0_2021122915		
Uboot	1.2.5_201810		
Kernel	#244 SMP PREEMPT Sat Sep 18 09:05:11 CST 2021		
<div>Refresh Detailed Version</div>			

Figure 3-4 System Info Interface

See Figure 3-4 for the system info interface. You can click **Refresh** to obtain the latest system information, click **Version Detail** to obtain the detailed information of WEB, Gateway, Uboot and Kernel. The table below explains the items shown in Figure 3-4.

Item	Description
<b>MAC Address</b>	MAC address of LAN 1 or LAN 2.
<b>IP Address</b>	The three parameters from left to right are IP address, subnet mask and default gateway of LAN 1 or LAN 2.
<b>DNS Server</b>	DNS server address of LAN 1 or LAN 2.
<b>Receive Packets, Transmit Packets</b>	The amount of receive/transmit packets after the gateway's startup, including three categories: All, Error and Drop.
<b>Current Speed</b>	The current speed of data receiving and transmitting.
<b>Work Mode</b>	The work mode of the network, including six options: 10 Mbps Half Duplex, 10 Mbps Full Duplex, 100 Mbps Half Duplex, 100 Mbps Full Duplex, 1000 Mbps Full Duplex and Disconnected.
<b>Runtime</b>	Time of the gateway keeping running normally after startup. This parameter updates every 2s.
<b>CPU Temperature</b>	Display the real time temperature of the CPU.
<b>Serial Number</b>	Unique serial number of an UMG gateway.
<b>WEB</b>	Current version of the WEB interface.
<b>Gateway</b>	Current version of the gateway service.
<b>Uboot</b>	Current version of Uboot.
<b>Kernel</b>	Current version of the system kernel on the gateway.
<b>Firmware</b>	Current version of the firmware on the gateway.

### 3.2.2 Board State

Board Status		
Slot No.	Type	Status
1	---	Disconnected
2	---	Disconnected
3	---	Disconnected
4	---	Disconnected
5	---	Disconnected
6	---	Disconnected

Figure 3-5 Board Status List

See Figure 3-5 for the Board Status List. It displays the online status of each board connected to the gateway, telling the board type for each slot number as well as if the board is connected or not.

### 3.2.3 Warning Info

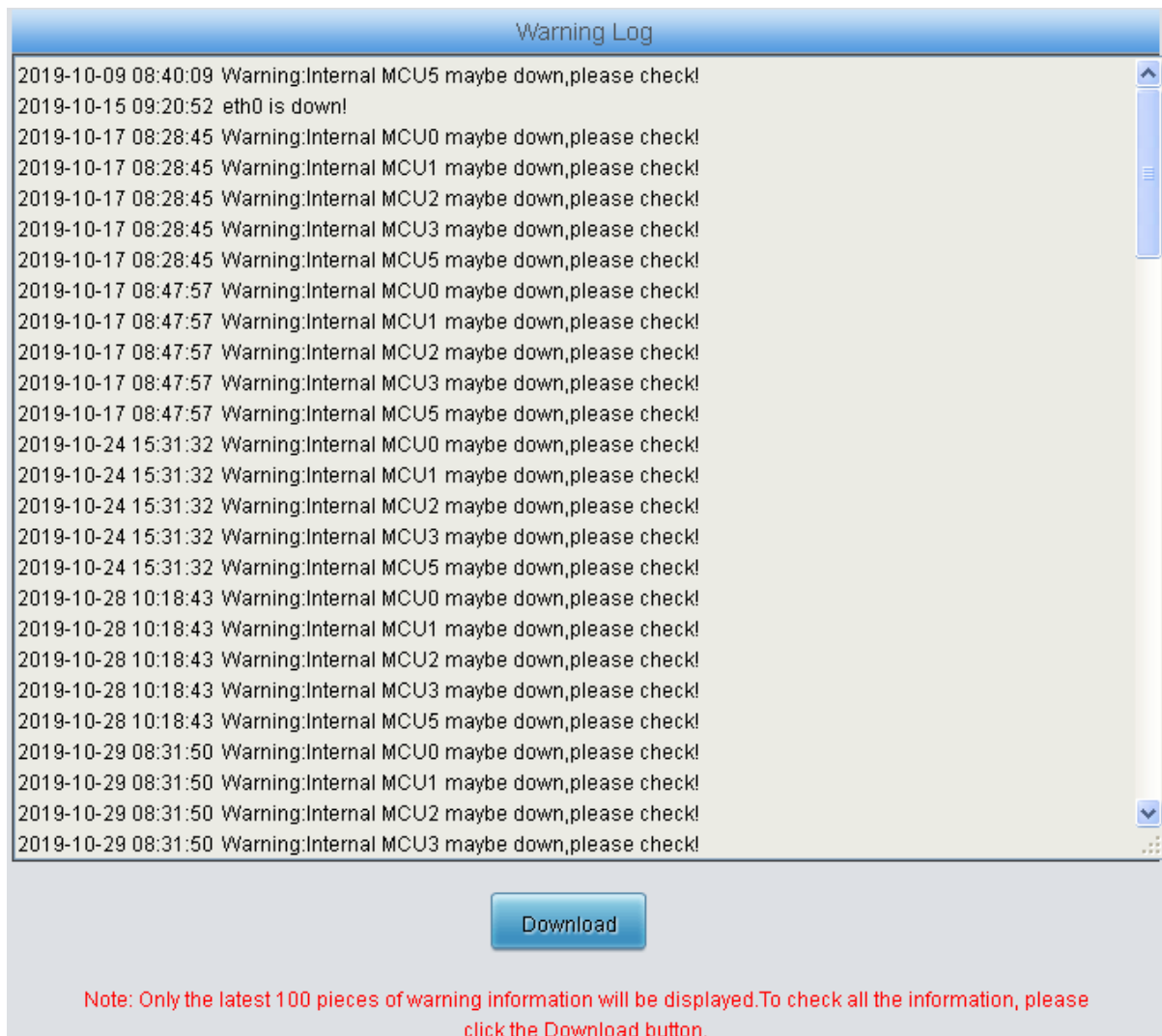


Figure 3-6 Warning Info Interface

See Figure 3-6 for the Warning Information interface. It displays all the warning information on the gateway.

## 3.3 Gateway Setting

SIP Settings includes **Board Setting** and **Board Information**. See Figure 3-7.



Figure 3-7 Gateway Settings

### 3.3.1 Board Setting

The Board Setting interface displays all the board types of the UMG gateway. See Figure 3-8. Click **Configuration** to go to the configuration interface of each board. You can refer to the



corresponding gateway's manual for detailed operations.



Subboard Gateway			
Slot No.	Subboard IP	Gateway Type	Configuration
1	---	---	--
2	---	---	--
3	---	---	--
4	169.254.1.104	UMG-2120	
5	---	---	--
6	169.254.1.106	UMG-2120	

Figure 3-8 Board Setting Interface

### 3.3.2 Board Information

The Board Information interface displays all the route and port information. See Figure 3-9 below.

Route Info	Port Info		
IP->TEL/IP/PSTN			
IP/SIP Trunk Group	Port Group/IP/PCM Trunk Group	Subboard	
TEL/PSTN->IP			
Port Group/PCM Trunk Group	IP/SIP Trunk Group	Subboard	
Port Group[1]	172.16.30.6	8--UMG-1016S	

Figure 3-9 Board Information Interface

## 3.4 Board Group


Board Group				
Check	Index	Boards	Description	Modify
<input type="checkbox"/>	0	1,2,3,4,5,6	default	
<div> <input type="button" value="Check All"/> <input type="button" value="Uncheck All"/> <input type="button" value="Inverse"/> <input type="button" value="Delete"/> <input type="button" value="Clear All"/> <input type="button" value="Add New"/> </div>				
1 Items Total   20 Items/Page   1/1   First   Previous   Next   Last   Go to Page <input type="text" value="1"/> 1 Pages Total				

Figure 3-10 Board Group Settings

See Figure 3-10 for the Board Group Setting interface. A new board group can be added by the **Add New** button on the bottom right corner of the list in the above figure. See Figure 3-11 for the Board Group Adding interface.

Figure 3-11 Add New Board Group

The table below explains the items shown in Figure 3-11.

Item	Description
<b>Index</b>	The unique index of each board group, which is mainly used in the configuration of routing rules and number manipulation rules to correspond to board groups.
<b>Description</b>	More information about each board group.
<b>Boards</b>	The boards in the board group. If the checkbox before a board is grey, it indicates that the board has been occupied. The ticked boards herein will be displayed in the column 'Boards' in Figure 3-10.

After configuration, click **Save** to save the settings into the gateway or click **Close** to cancel the settings.

Click **Modify** in Figure 3-10 to modify a board group. The configuration items on the board group modification interface are the same as those on the **Board Group Adding** interface.

To delete a board group, check the checkbox before the corresponding index in Figure 3-10 and click the **Delete** button. **Check All** means to select all available items on the current page; **Uncheck All** means to cancel all selections on the current page; **Inverse** means to uncheck the selected items and check the unselected. To clear all board groups at a time, click the **Clear All** button in Figure 3-10.

## 3.5 Route Settings

Route Settings is used to specify the routing rules for calls from IP to TEL/PSTN. See Figure 3-12.

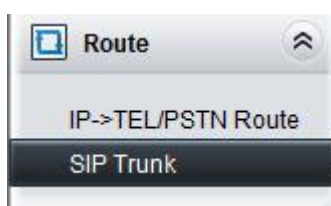
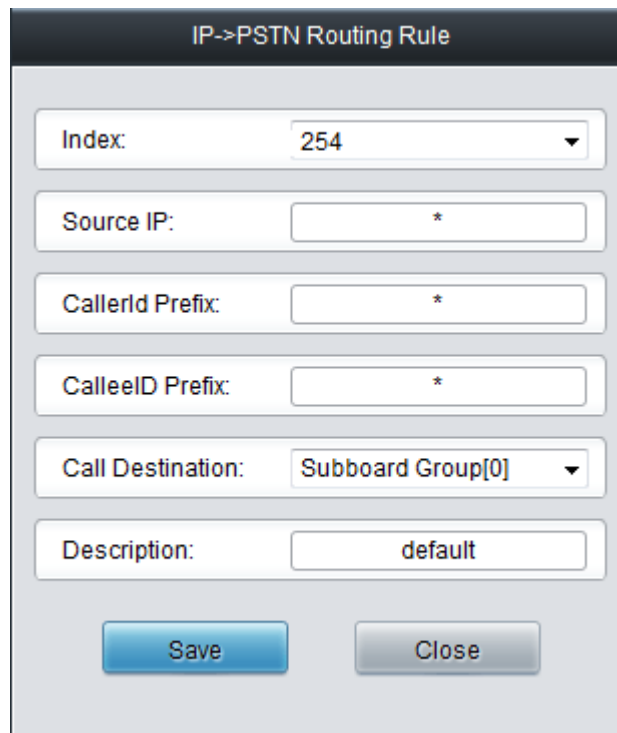


Figure 3-12 Route Settings

### 3.5.1 IP to TEL/PSTN Route

By default, there is no IP→TEL/PSTN routing rule available on the gateway. Click **Add New** to add some manually. See Figure 3-13 for the IP→TEL/PSTN routing rule adding interface.



The image shows a configuration window titled "IP->PSTN Routing Rule". It contains several input fields: "Index" with a dropdown menu showing "254", "Source IP" with a text box containing "\*", "CallerID Prefix" with a text box containing "\*", "CalleeID Prefix" with a text box containing "\*", "Call Destination" with a dropdown menu showing "Subboard Group[0]", and "Description" with a text box containing "default". At the bottom, there are two buttons: "Save" and "Close".

Figure 3-13 Add New Routing Rule (IP→TEL/PSTN)

The table below explains the items shown in the above figure.

Item	Description
<b>Index</b>	The unique index of each routing rule, which denotes its priority. A routing rule with a smaller index value has a higher priority. If a call matches several routing rules, it will be processed according to the one with the highest priority.
<b>Source IP</b>	The IP address where the calls come from.

<b>CallerID Prefix, CalleeID Prefix</b>	A string of numbers at the beginning of the calling/called party number. This item can be set to a specific string or “*” which indicates any string. These two configuration items together with <b>Call Initiator</b> can specify the calls which apply to a routing rule.										
	Rule Explanation:										
	<table><tr><th>Character</th><th>Description</th></tr><tr><td>“0”~“9”</td><td>Digits 0~9.</td></tr><tr><td>“[”</td><td>‘[ ]’ is used to define the range for a number. Values within it only can be digits ‘0~9’, punctuations ‘-’ and ‘,’. For example, [1-3,6,8] indicates any one of the numbers 1, 2, 3, 6, 8.</td></tr><tr><td>“-”</td><td>‘-’ is used only in ‘[ ]’ between two numbers to indicates any number between these two numbers.</td></tr><tr><td>“ ” ,</td><td>‘,’ is used to separate numbers or number ranges, representing alternatives.</td></tr></table>	Character	Description	“0”~“9”	Digits 0~9.	“[”	‘[ ]’ is used to define the range for a number. Values within it only can be digits ‘0~9’, punctuations ‘-’ and ‘,’. For example, [1-3,6,8] indicates any one of the numbers 1, 2, 3, 6, 8.	“-”	‘-’ is used only in ‘[ ]’ between two numbers to indicates any number between these two numbers.	“ ” ,	‘,’ is used to separate numbers or number ranges, representing alternatives.
	Character	Description									
	“0”~“9”	Digits 0~9.									
“[”	‘[ ]’ is used to define the range for a number. Values within it only can be digits ‘0~9’, punctuations ‘-’ and ‘,’. For example, [1-3,6,8] indicates any one of the numbers 1, 2, 3, 6, 8.										
“-”	‘-’ is used only in ‘[ ]’ between two numbers to indicates any number between these two numbers.										
“ ” ,	‘,’ is used to separate numbers or number ranges, representing alternatives.										
Example: Rule “0[0-3,7][6-9]” denotes the prefix is 006, 016, 026, 036, 007, 017, 027, 037, 008, 018, 028, 038, 009, 019, 029, 039, 076, 077, 078, 079.											
<b>Note:</b> Multiple rules are supported for CallerID/CalleeID prefix. They are separated by “.”.											
<b>Call Destination</b>	Board group to which the call will be routed.										
<b>Description</b>	More information about each routing rule.										

After configuration, click **Save** to save the settings into the gateway or click **Close** to cancel the settings. See Figure 3-14 for the IP→TEL/PSTN Routing Rule Configuration Interface.

Default Routing Rule:

☒ Turning by Subboard Gateway:

☐ Subboard Slot No. Priority:

☐ Subboard Idle Channels Priority:

Routing Rules							
Check	Index	Call Initiator	CallerID Prefix	CalleeID Prefix	Call Destination	Description	Modify
<input type="checkbox"/>	254	201.123.116.197	*	*	Subboard Group[6]	default	
<input type="checkbox"/>	255	201.123.112.140	*	*	Subboard Group[1]	default	
<input type="checkbox"/>	253	201.123.111.82	*	*	Subboard Group[1]	default	

3 Items Total 20 Items/Page 1/1 First Previous Next Last Go to Page 1 1 Pages Total

Figure 3-14 IP→TEL/PSTN Routing Rule Configuration Interface

Click **Modify** in Figure 3-14 to modify a routing rule. The configuration items on the IP→TEL/PSTN routing rule modification interface are the same as those on the **Add New Routing Rule (IP→TEL/PSTN)** interface. Note that the item **Index** cannot be modified.

To delete a routing rule, check the checkbox before the corresponding index in Figure 3-14 and click the **Delete** button. **Check All** means to select all available items on the current page; **Uncheck All** means to cancel all selections on the current page; **Inverse** means to uncheck the selected items and check the unselected. To clear all routing rules at a time, click the **Clear All** button in Figure 3-14.

### 3.5.2 SIP Trunk

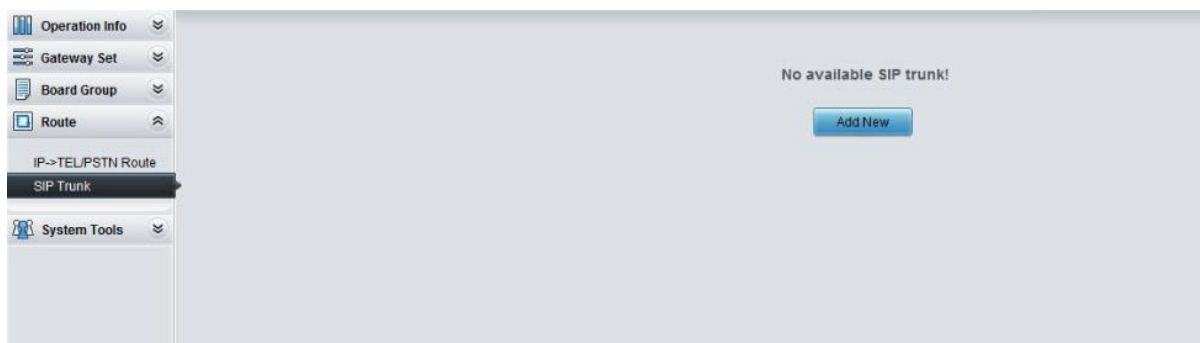


Figure 3-15 SIP Trunk Configuration Interface

See Figure 3-15 for the SIP Trunk Configuration interface. By default, there is no SIP trunk available on the gateway. Click **Add New** to add them manually.

Figure 3-16 Add New SIP Trunk

The table below explains the items shown in Figure 3-16.

Item	Description
<b>Index</b>	The unique index of each SIP trunk.
<b>Description</b>	More information about each SIP trunk group.
<b>Remote Address</b>	Address of the SIP trunk, i.e. the IP address or domain name of the remote SIP terminal which will establish call conversation with the gateway.
<b>Local Network Port</b>	The network port where the SIP trunk locates.

## 3.6 System Tools

System Tools is mainly for gateway maintenance. It provides such features as IP modification, time synchronization, data backup, log inquiry and connectivity check. See Figure 3-17 for details.

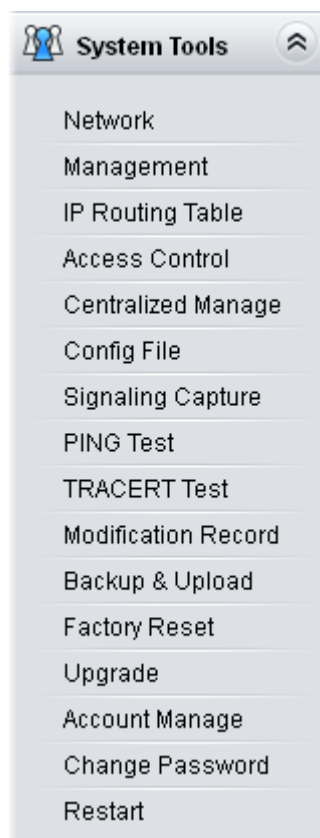
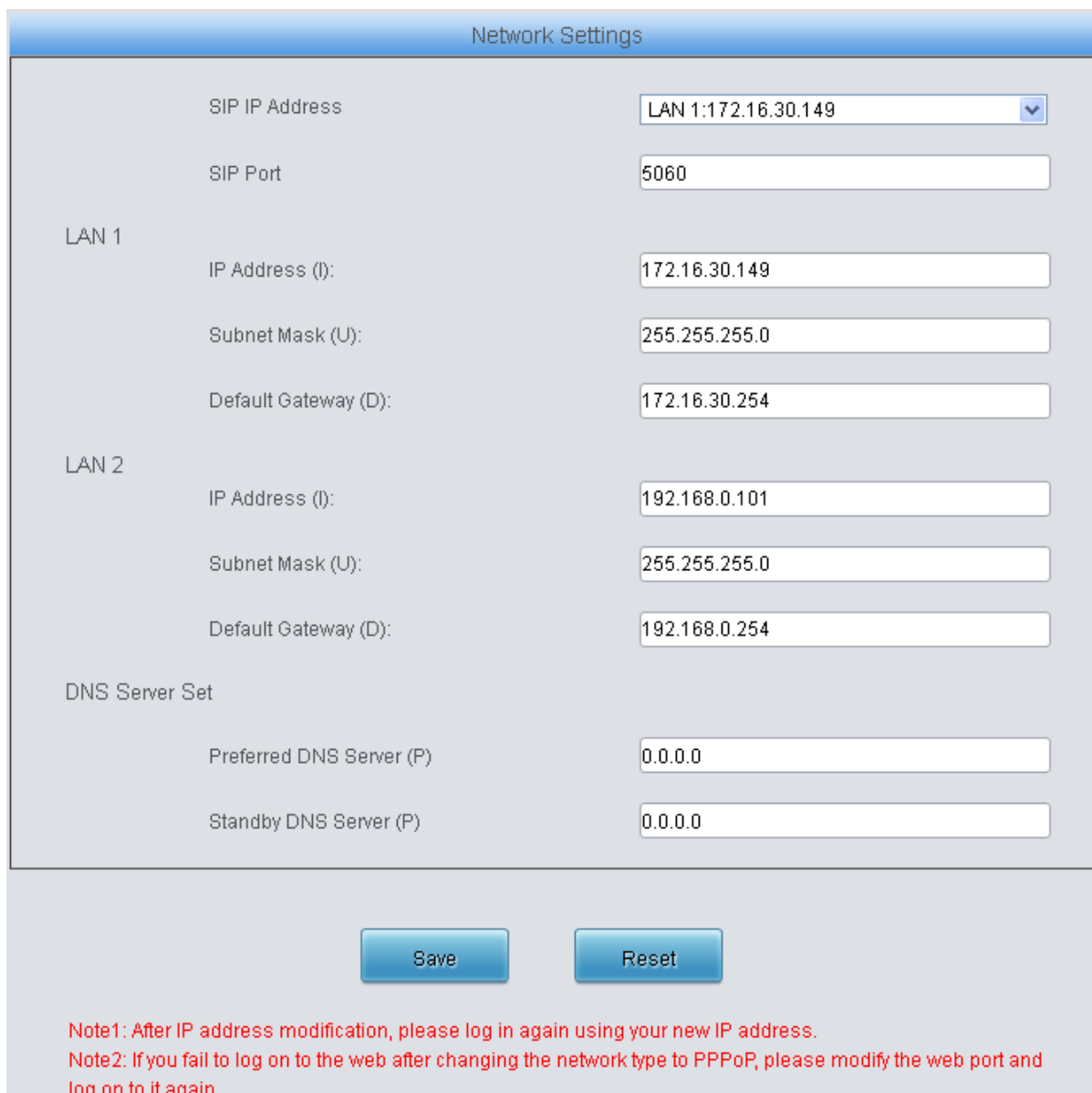


Figure 3-17 System Tools

### 3.6.1 Network



The image shows a 'Network Settings' web interface. At the top, there's a title bar 'Network Settings'. Below it, the settings are organized into sections. The 'SIP' section includes a dropdown for 'SIP IP Address' (set to 'LAN 1:172.16.30.149') and a text box for 'SIP Port' (set to '5060'). The 'LAN 1' section has text boxes for 'IP Address (I):' (172.16.30.149), 'Subnet Mask (U):' (255.255.255.0), and 'Default Gateway (D):' (172.16.30.254). The 'LAN 2' section has text boxes for 'IP Address (I):' (192.168.0.101), 'Subnet Mask (U):' (255.255.255.0), and 'Default Gateway (D):' (192.168.0.254). The 'DNS Server Set' section has text boxes for 'Preferred DNS Server (P)' (0.0.0.0) and 'Standby DNS Server (P)' (0.0.0.0). At the bottom, there are 'Save' and 'Reset' buttons. Below the buttons, there are two red notes: 'Note1: After IP address modification, please log in again using your new IP address.' and 'Note2: If you fail to log on to the web after changing the network type to PPPoP, please modify the web port and log on to it again.'

Figure 3-18 Network Settings Interface

See Figure 3-18 for the network settings interface. A gateway has two LANs, each of which can be configured with independent IP address, subnet mask, default gateway and DNS server. On this interface, SIP Address is used to select the IP address for SIP signaling, using LAN 1 by default; SIP Signaling Port is used to set the monitoring port for SIP signaling, with the value range of 5001~65535 and the default value of 5060.

**Note: 1. The two configuration items IP Address and Default Gateway cannot be the same for NET 1 and NET 2.**

**2. By default, *Speed and Duplex Mode* is hidden, set to Automatic Detection, and you can click 'F' to let it display. We suggest you do not modify it because the non-automatic detection may cause abnormality in network interface.**

After configuration, click **Save** to save the above settings into the gateway or click **Reset** to restore the configurations. After changing the IP address, you shall log in the gateway again using your new IP address.

### 3.6.2 Management

Management Parameters	
<b>WEB Management</b>	
WEB Port	80
Access Setting	Allow All IPs
Time to Log out	1800 s
<b>SSH Management Config</b>	
SSH	<input checked="" type="radio"/> Yes <input type="radio"/> No
SSH Port	22
<b>Remote Data Capture Config</b>	
Remote Data Capture	<input checked="" type="radio"/> Yes <input type="radio"/> No
<input checked="" type="checkbox"/> Capture RTP	LAN 1(172.16.30.149)
<b>FTP Config</b>	
FTP	<input checked="" type="radio"/> Yes <input type="radio"/> No
<b>SYSLOG Parameters</b>	
SYSLOG	<input checked="" type="radio"/> Yes <input type="radio"/> No
Server Address	127.0.0.1
SYSLOG Level	ERROR
<b>CDR Parameters</b>	
Send CDR	<input checked="" type="radio"/> Yes <input type="radio"/> No
Server Address	169.254.1.100
Server Port	3
<b>Parameter Config</b>	
NAT Traversal	<input checked="" type="checkbox"/> Enable
Traversal Type	Port Mapping
LAN2 Mapping Address	
LAN2 Mapping Address	
RTP Self-adaption	<input type="checkbox"/> Enable
Auto Reply of Source Address	<input type="checkbox"/> Enable
Send Response By Former Via	<input type="checkbox"/> Enable
RTP Port	6000,20000
<b>Send Number Classification Information</b>	
Send Number Classification Data	<input checked="" type="radio"/> Yes <input type="radio"/> No
Server Ip	127.0.0.1
Server port	4
<b>Time Parameters</b>	
NTP	<input checked="" type="radio"/> Yes <input type="radio"/> No
NTP Server Address	127.0.0.1
Synchronizing Cycle	3600 s
Daily Restart	<input checked="" type="radio"/> Yes <input type="radio"/> No
Restart Time	7 h 13 m
System Time	<input checked="" type="checkbox"/> Modify 2019-11-25 13:30:13
Time Zone	GMT+8:00 (Beijing, Singapore, Taipei, Kua)
<div>Save</div> <div>Reset</div>	

Figure 3-19 Management Parameters Setting Interface



See Figure 3-19 for the Management Parameters Setting interface. The table below explains the items shown in the above figure.

Item	Description
<b>WEB Port</b>	The port which is used to access the gateway via WEB. The default value is 80.
<b>Access Setting</b>	Sets the IP addresses which can access the gateway via WEB. By default, all IPs are allowed. You can set an IP whitelist to allow all the IPs within it to access the gateway freely. Also you can set an IP blacklist to forbid all the IPs within it to access the gateway.
<b>Time to Log Out</b>	The gateway will log out automatically if it is not operated during a time longer than the value of this item, calculated by s, with the default value of 1800ms.
<b>SSH</b>	Sets whether to enable the gateway to be accessed via SSH, with the default value of <i>No</i> .
<b>SSH Port</b>	The port which is used to access the gateway via SSH.
<b>Remote Data Capture</b>	After this feature is enabled, you can obtain the gateway data via a remote capture tool. The default value is <i>No</i> .
<b>Capture RTP</b>	Sets whether to capture RTP. Once this feature is enabled, the RTP package will also be captured by the selected network.
<b>FTP</b>	Sets whether to enable the FTP server, with the default value of <i>Yes</i> .
<b>SYSLOG</b>	Sets whether to enable SYSLOG. It is required to fill in <b>SYSLOG Server Address</b> and <b>SYSLOG Level</b> in case SYSLOG is enabled. By default, <b>SYSLOG</b> is disabled.
<b>Server Address</b>	Sets the SYSLOG server address for log reception.
<b>SYSLOG Level</b>	Sets the SYSLOG level. There are three options: <i>ERROR</i> , <i>WARNING</i> and <i>INFO</i> .
<b>Send CDR</b>	Sets whether to enable the feature of sending CDR. It is required to fill in <b>Server Address</b> and <b>Server Port</b> in case Send CDR is enabled. By default, <b>Send CDR</b> is disabled.
<b>Server Address</b>	The address of the server to receive CDR.
<b>Server Port</b>	The port of the server to receive CDR.
<b>NAT Traversal, Traversal Type</b>	Sets whether to enable the NAT traversal. By default this feature is disabled. There is only one traversal type: <i>Port Mapping</i> .
<b>LAN1 Mapping Address, LAN2 Mapping Address</b>	The mapping addresses of LAN1 and LAN2 in case the NAT traversal is enabled. If the port mapping is selected as the traversal type, you are required to set the mapping address on the router and fill in the corresponding information here as well. By default, only the IP address need be filled in, and the port value is just the same as the SIP signaling port.
<b>RTP Self-adaption</b>	When this feature is enabled, the RTP reception address or port carried by the signaling message from the remote end, if not consistent with the actual state, will be updated to the actual RTP reception address or port. By default, this feature is <i>disabled</i> .
<b>Auto Reply of Source Address</b>	Once this feature is enabled, the gateway will reply the source address in the invite message. The default value is <i>disabled</i> .
<b>Send Response By Former Via</b>	To IP->PSTN calls, enabling this feature means to close the automatic modification on the Via header of the response message. By default it is disabled.

<b>RTP Port</b>	Supported RTP port range for the IP end to establish a call conversation. Range of value: 5000~60000, with the lower limit of 6000 and the upper limit of 20000 by default. The difference between is not less than 4096.
<b>NTP</b>	Sets whether to enable the NTP time synchronization feature. It is required to fill in <b>NTP Server Address</b> , <b>Synchronizing Cycle</b> and <b>Time Zone</b> in case NTP is enabled. By default, <b>NTP</b> is disabled.
<b>NTP Server Address</b>	Sets the Server address for NTP time synchronization.
<b>Synchronizing Cycle</b>	Sets the cycle for NTP time synchronization.
<b>Daily Restart</b>	Sets whether to restart the gateway regularly every day at the preset <b>Restart Time</b> . By default, this feature is disabled.
<b>Restart Time</b>	Sets the time to restart the gateway regularly.
<b>System Time</b>	The system time. Check the checkbox before <b>Modify</b> and change the time in the edit box.
<b>Time Zone</b>	The time zone of the gateway.

### 3.6.3 IP Routing Table

IP Routing Table is allowed to be set. The gateway will, according to the IP routing table, send the IP packages via a specified route to the destination network segment. By default, there is no routing information available on the gateway, click **Add New** to add manually. See Figure 3-20.

The image shows a 'Routing Table' configuration window. It contains four input fields: 'No.' with the value '0', 'Destination' (empty), 'Subnet Mask' (empty), and 'Network Port' with a dropdown menu showing 'NET 2(201.123.111.15)'. At the bottom are two buttons: 'Save' and 'Close'.

Figure 3-20 Add Routing Table Interface

The table below explains the items shown in above figures.

Item	Description
<b>No.</b>	The number of the routing for the LAN in routing table.
<b>Destination</b>	The network segment the in which the IP address is accessible for the network port.
<b>Subnet Mask</b>	The subnet mask of the network segment.
<b>Network Port</b>	The corresponding network port of the routing.

After configuration, click **Save** to save the settings into the gateway or click **Close** to cancel the settings. See Figure 3-21 for the Routing Table List.


[illegible]

Figure 3-21 Routing Table List

Click **Modify** in Figure 3-21 to modify a routing. The configuration items on the routing table modification interface are the same as those on the **Add Routing Table** interface. Note that the item **No.** cannot be modified.

To delete a routing, check the checkbox before the corresponding index in Figure 3-21 and click the **Delete** button. To clear all number manipulation rules at a time, click the **Clear All** button in Figure 3-21.

### 3.6.4 Access Control

Access Control List			
Check	Index	Command	Modify
<input type="checkbox"/>	0	iptables -I INPUT -s 172.16.30.31 -p udp -j ACCEPT	

1 Items Total   20 Items/Page   1/1   First   Previous   Next   Last   Go to Page      1 Pages Total

**Note: Application and cancel application buttons are for all current set rules, not direct at a certain rule.**

Figure 3-22 Access Control List Interface

On the Access Control List interface, once you add a piece of command to ACL, the network flow will be restricted, only the particular devices allowed to visit the gateway and only the data packages on the designated ports be forwarded. Click **Add New** to add a new piece of command.

Access Control Command

Index:

1

Command:

Save

Close

Figure 3-23 Add Access Control Command

Input a piece of command into the Command item and click **Save** to save the settings to the gateway. Click **Close** to cancel your settings. After that, click **Apply** to make the new command

valid.

Click **Modify** to modify a command. The configuration items on the Access Control Command Modification interface are the same as those on the **Add Access Control Command** interface. Note that the item **Index** cannot be modified.

To delete an Access Control Command, check the checkbox before the corresponding index and click the **Delete** button, and then click the **Apply** button to make the deleted command invalid. **Check All** means to select all available items on the current page; **Uncheck All** means to cancel all selections on the current page; **Inverse** means to uncheck the selected items and check the unselected. To clear all access control commands at a time, click the **Clear All** button.

**Note:** 1. Currently, only the command iptables is supported by the gateway.

2. When you add or modify or delete commands manually, don't forget to click the **Apply** button to make your settings valid. However, when the gateway restarts or the configuration is leading-in, you need not click the **Apply** button and the commands will get valid automatically.

### 3.6.5 Centralized Manage

Figure 3-24 Centralized Management Setting Interface

The Centralized Management Setting interface is used to configure parameters about centralized management. The gateway can register to a centralized management platform and accept the management of the platform. The table below explains the items shown in this interface.

Item	Description
<b>Centralized Manage</b>	Whether to enable the 'Centralized Manage' feature or not.
<b>Auto Change Default Gateway</b>	Once this feature is enabled, the gateway will connect the DCMS via another network port automatically once the connected network cable is loosen or drawn out. The default value is disabled.
<b>Management Platform</b>	Select a management platform for the gateway to register.

<b>Company Name</b>	The company name used to register the gateway to DCMS, only valid when DCMS is selected.
<b>Gateway Description</b>	The description displayed on DCMS after the gateway is registered to DCMS, giving an easy identification of the gateway in device grouping. This item is only valid when DCMS is selected.
<b>SNMP Server Address</b>	IP address of SNMP.
<b>Community String</b>	Community string used for information acquisition.
<b>Authorization Code</b>	The maximum length of the authorization code is 64 bits. There is no limitation on the input content. When connecting to the centralized management server for the first time, you can enter the connection by entering the correct authorization code. After the connection is successful, you can always connect even if you change to the wrong authorization code, but the centralized management feature with the wrong authorization code cannot be turned off.
<b>Working Status</b>	The status of the connection between the gateway and the centralized management server. It is only valid when DCMS is selected.

### 3.6.6 Configuration File

SMGConfig.ini

Config File

```
[Version]
GWSvrV=1.0.1
KernelV=Linux mpc8309som 2.6.34 #85 Thu Dec 6 10:12:49 CST 2012
WebV=1.0.1
CpldV=45621.586
HWAddr1=00:04:9F:EF:03:02
HWAddr2=00:04:9F:EF:03:02
[Client]
Ip1=169.254.1.101
Port1=80
Ip2=169.254.1.102
Port2=80
Ip3=169.254.1.103
Port3=80
Ip4=169.254.1.104
Port4=80
Ip5=169.254.1.105
Port5=80
Ip6=169.254.1.106
Port6=80
Ip7=169.254.1.107
Port7=80
Ip8=169.254.1.108
Port8=80
[WebCtrl]
LocalAddress=0.0.0.0
LocalPort=1001
UserName=BqtTPNLUr/23x1wC/w
Pwd=BqtTPNLUr/23x1wC/w
[Monitor]
LocalAddress=0.0.0.0
LocalPort=1002
AutoExec=1
UpgradeExecPath=/usr/local/apache/htdocs/RecUpgrade
IniFilePath=/mnt/flash
[DigitsMapRulesInfo]
DigitsMapRulesNum=2
[NetConfig]
arpMode=1
BondFlag=0
IpAddr1=172.16.30.149
Subnet1=255.255.255.0
Gateway1=172.16.30.254
```

Save Reset

Note: You shall restart the service or system to validate the modified configuration file!  
Note2: Non-professional person do not modify the hosts file.  
Note3: In case of manual modification, avoid the appearance of duplicate configuration item.  
Note4: Please set a line at the end of the file to avoid missing reading valid data from the last line of the file!

Figure 3-25 Configuration File Interface

See Figure 3-25 for the Configuration File interface where you can check and modify some relative configuration files, including SMGConfig.ini and ShConfig.ini. Configurations about the gateway server, such as route rules, number manipulation, number filter and so on, are included in SMGConfig.ini; Configurations about the board are included in ShConfig.ini. You can modify these configurations on the interface directly, and then click **Save** to save the above settings into the gateway or click **Reset** to restore the configurations.

### 3.6.7 Signaling Capture

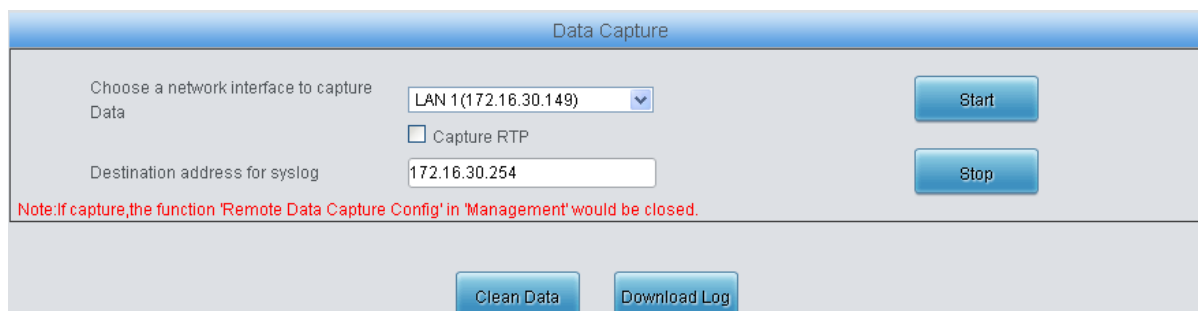


Figure 3-26 Signaling Capture Interface

See Figure 3-26 for the Signaling Capture interface. Data Capture is used to capture data on the network interface you choose. Click **Start** to start capturing data (1024000 packets at most) on the corresponding network interface. SIP and SysLog are supported at present. You can enter the Syslog destination address to send Syslog to wherever required. Click **Stop** to stop data capture and download the captured packets.

Click **Clean Data** to clean all the captured packages. Click **Download Log** to download such logs as core files, configuration files, error information and so on.

### 3.6.8 PING Test

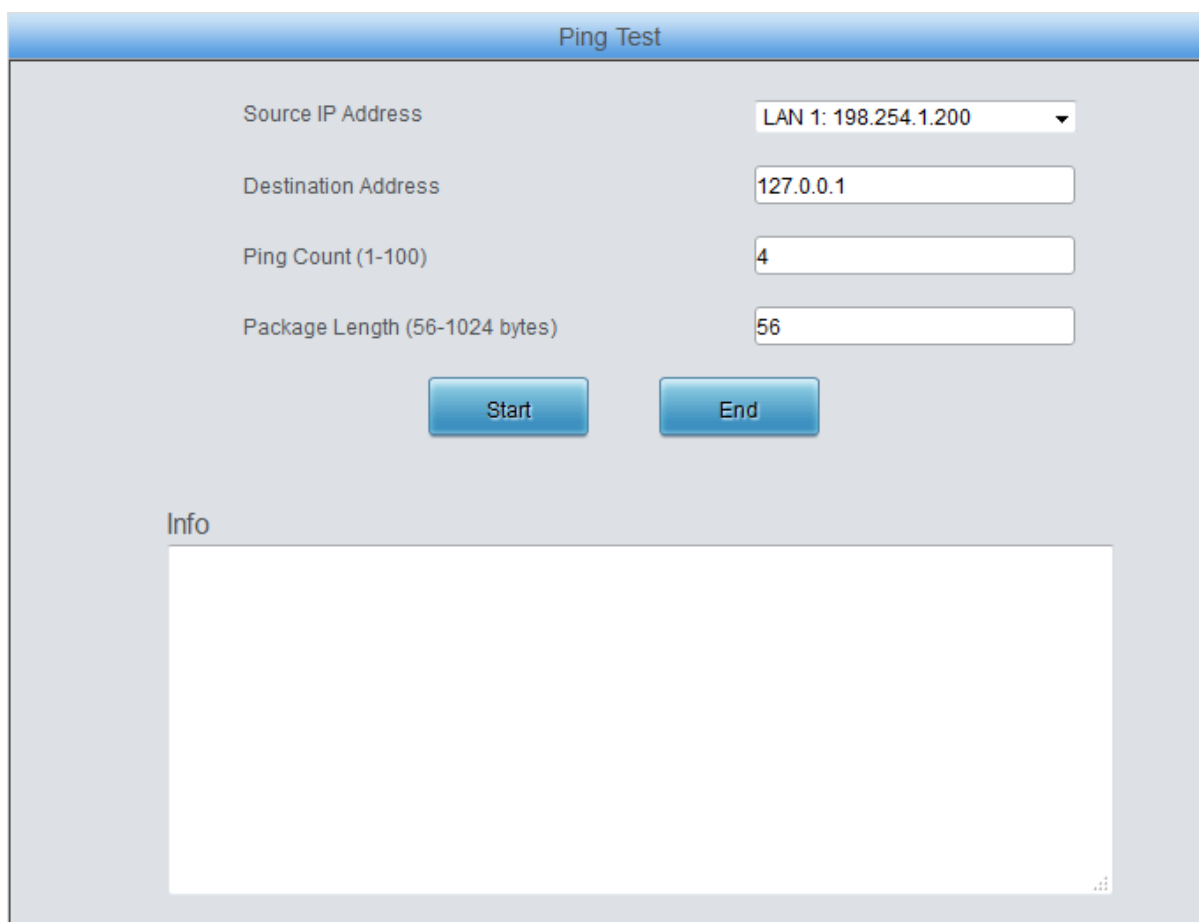


Figure 3-27 Ping Test Interface

See Figure 3-27 for the Ping Test interface. A Ping test can be initiated by the gateway on a designated IP address to check the connection status between them. The table below explains the configuration items shown in the above figure.

Item	Description
<b>Source IP Address</b>	Source IP address where the Ping test is initiated.
<b>Destination Address</b>	Destination IP address on which the Ping test is executed.
<b>Ping Count</b>	The number of times that the Ping test should be executed. Range of value: 1~100.
<b>Package Length</b>	Length of a data package used in the Ping test. Range of value: 56~1024 bytes.
<b>Info</b>	The information returned during the Ping test, helping you to learn the network connection status between the gateway and the destination address.

After configuration, click **Start** to execute the Ping test; click **End** to terminate it immediately.



### 3.6.9 TRACERT Test

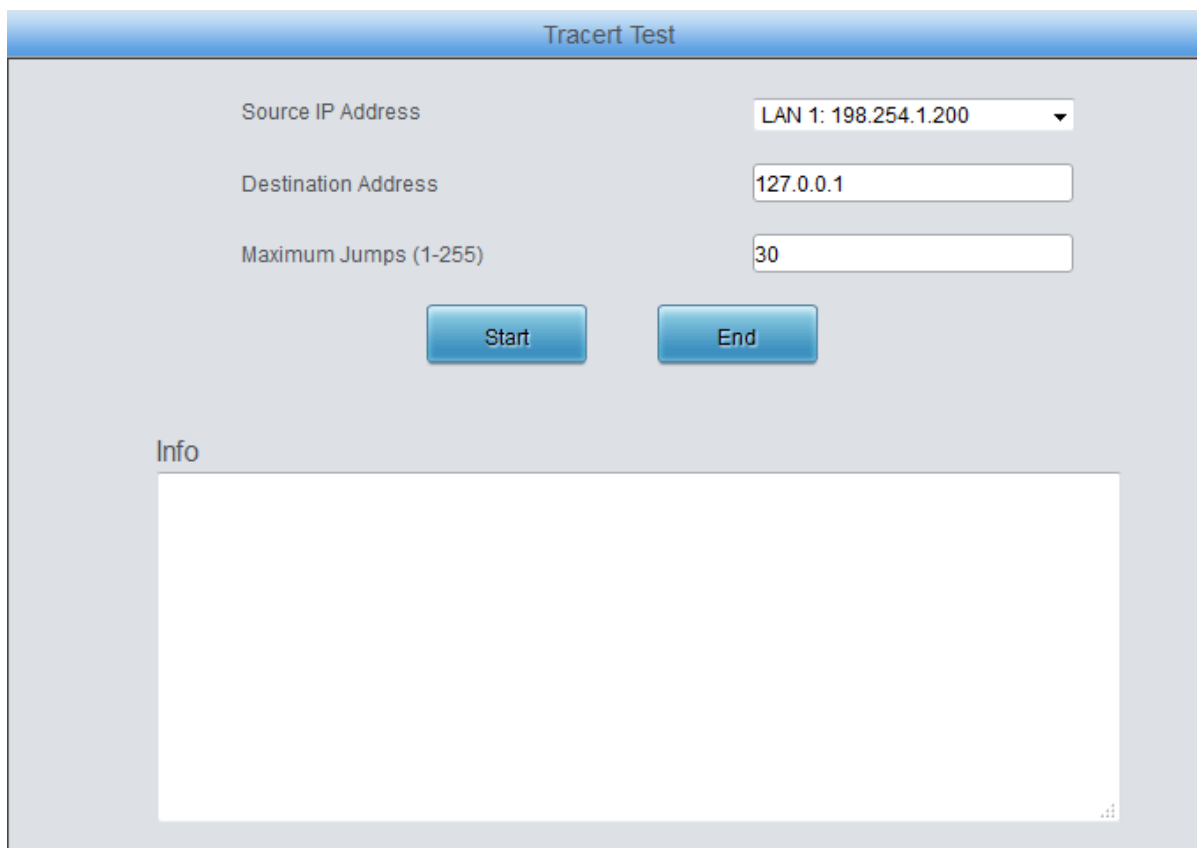


Figure 3-28 Tracert Test Interface

See Figure 3-28 for the Tracert Test interface. A Tracert test can be initiated by the gateway on a designated IP address to check the routing status between them. The table below explains the configuration items shown in the above figure.

Item	Description
<b>Source IP Address</b>	Source IP address where the Tracert test is initiated.
<b>Destination Address</b>	Destination IP address on which the Tracert test is executed.
<b>Maximum Jumps</b>	Maximum number of jumps between the gateway and the destination address, which can be returned in the Tracert test. Range of value: 1~255.
<b>Info</b>	The information returned during the Tracert test, helping you to learn the detailed information about the jumps between the gateway and the destination address.

After configuration, click **Start** to execute the Tracert test; click **End** to terminate it immediately.

### 3.6.10 Modification Record

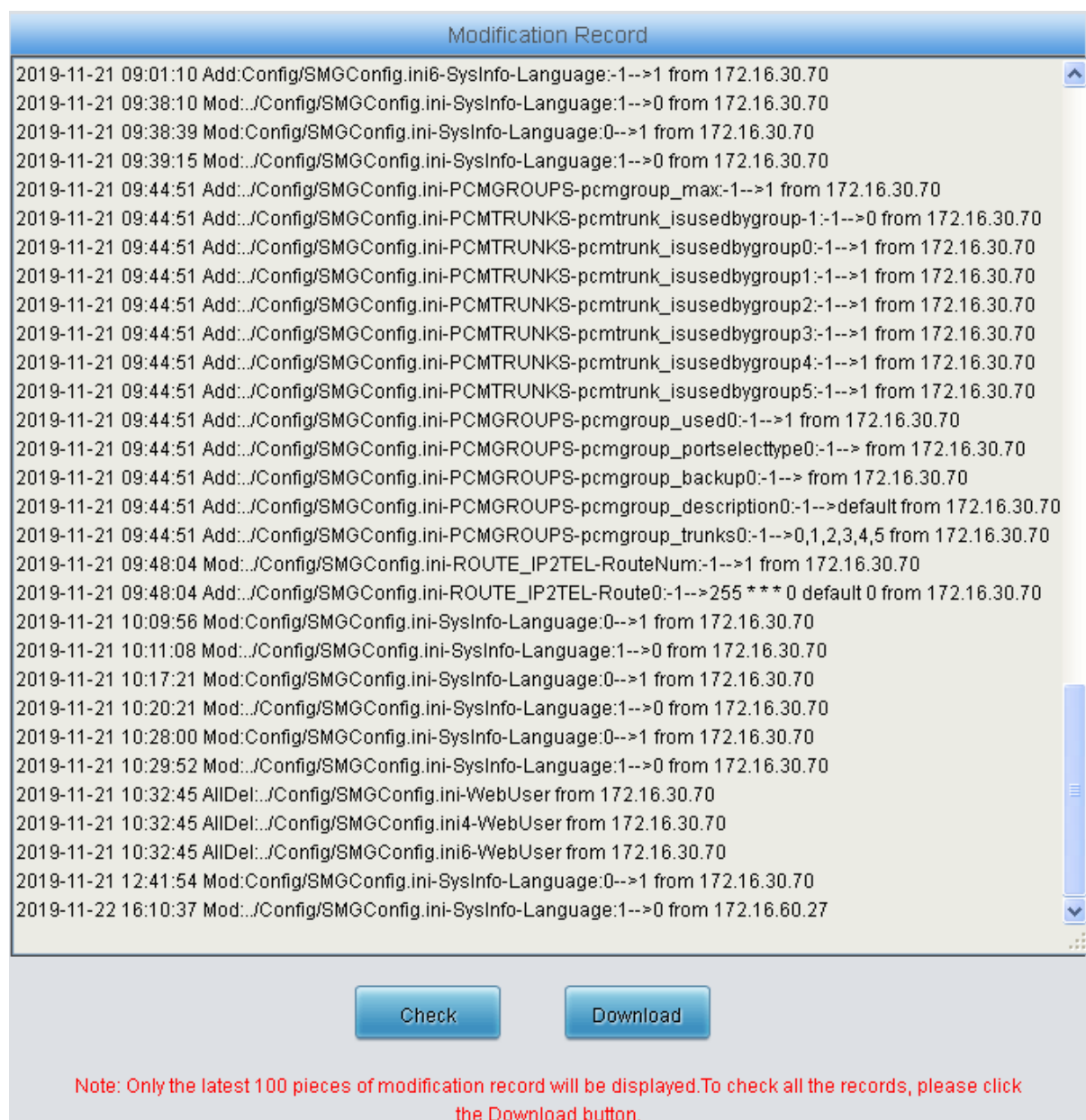


Figure 3-29 Modification Record Interface

The Modification Record interface is used to check the modification record on the web configuration. Click **Check** and the modification record will be shown on the dialog box. See Figure 3-29. Click **Download** to download the record file.

### 3.6.11 Backup & Upload

The image shows two stacked web interface sections. The top section, titled 'Data Backup', has a header bar with the same title. Below it, the text 'Choose a file to backup:' is followed by a dropdown menu currently showing 'Configuration file'. To the right of the dropdown is the instruction 'Click the 'Backup' button on the right to backup the file.' and a blue 'Backup' button. The bottom section, titled 'Data Upload', also has a header bar. Below it, the text 'To upload a file, select it and click the button 'Upload' on the right to start.' is followed by 'Choose a file to upload:', a dropdown menu showing 'Configuration file', an empty text input field, and a 'Browse...' button. A blue 'Upload' button is on the far right.

Figure 3-30 Backup & Upload Interface

See Figure 3-30 for the Backup and Upload interface. To back up data to your PC, you shall first choose the file in the pull-down list and then click **Backup** to start. To upload a file to the gateway, you shall first choose the file type in the pull-down list, then select it via **Browse...**, and at last click **Upload**. The gateway will automatically apply the uploaded data to overwrite the current configurations.

### 3.6.12 Factory Reset

The image shows a web interface titled 'Factory Reset' in a blue header bar. Below the header, the text 'Click the button 'Reset' below to restore to factory settings.' is centered. At the bottom of the interface is a blue 'Reset' button.

Figure 3-31 Factory Reset Interface

See Figure 3-31 for the Factory Reset interface. Click **Reset** to restore all configurations on the gateway to factory settings.

### 3.6.13 Upgrade

The image shows a web interface for upgrading. It features a table titled 'Current Version' with the following data:

Current Version	
Serial Number	4081
WEB	1.8.0_2021122915
Service	1.8.0_2021122915
Uboot	1.2.5_201810
Kernel	#244 SMP PREEMPT Sat Sep 18 09:05:11 CST 2021

Below the table is a section for file selection. It includes the text 'Select an Update File', a button labeled '选择文件' (Select File), and the status text '未选择任何文件' (No file selected). At the bottom of the interface are two blue buttons: 'Update' and 'Reset'.

Figure 3-32 Upgrade Interface

See Figure 3-32 for the upgrade interface where you can upgrade the WEB, gateway service,

kernel and firmware to new versions. Select the upgrade package “\*.tar.gz” via **Browse...** and click **Update** (The gateway will do MD5 verification before upgrading and will not start to upgrade until it passes the verification). Wait for a while and the gateway will finish the upgrade automatically. Note that clicking **Reset** can only delete the selected update file but not cancel the operation of **Update**.

### 3.6.14 Account Manage

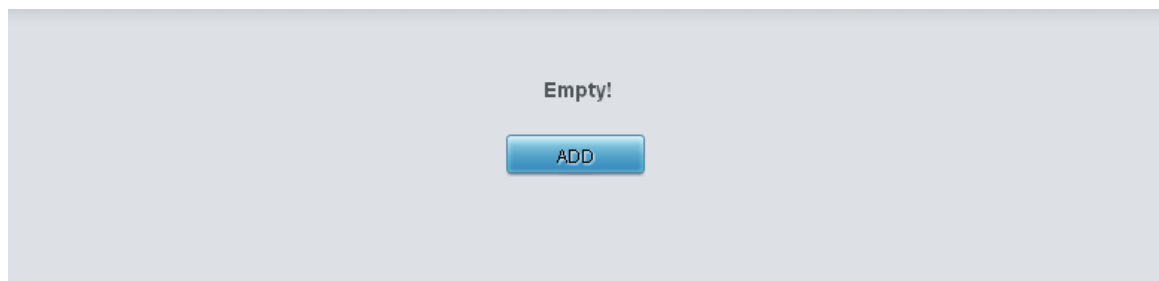


Figure 3-33 Account Management Interface

See Figure 3-33 for the Account Management interface. By default, there is no user information available on the gateway, click **Add** to add a piece of information.

Figure 3-34 User Information Adding Interface

The table below explains the configuration items shown on the interface.

Item	Description
<b>Index</b>	The unique index of each user information, starting from 0 and supporting up to 64 pieces of user information to add.
<b>User Name/Password</b>	User name and password for WEB login. Only numbers, letters and underscores are supported.
<b>Authority</b>	Operation rights, including two options <i>Read</i> and <i>Read/Write</i> .

After configuration, click **Save** to save the settings into the gateway or click **Close** to cancel the settings. See Figure 3-35 for the user information list.


Info				
Choose	Id	User	Permission	Modify
<input type="checkbox"/>	0	123	Read	
<div>Check All   Uncheck All   Inverse   Delete   Clear All   Add New</div> <div>1 Items Total   20 Items/Page   1/1   First   Previous   Next   Last   Go to Page 1   1 Pages Total</div>				

Figure 3-35 User Information List

Click **Modify** in Figure 3-35 to modify a piece of user information. The configuration items on the user information modification interface are the same as those on the **User Information Adding** interface. Note that the item **Index** cannot be modified.

To delete a piece of user information, check the checkbox before the corresponding index in Figure 3-36 and click the **Delete** button. **Check All** means to select all available items on the current page; **Uncheck All** means to cancel all selections on the current page; **Inverse** means to uncheck the selected items and check the unselected. To clear all user information at a time, click the **Clear All** button.

### 3.6.15 Change Password

Change Password	
Current Username	<input type="text" value="admin"/>
Current Password	<input type="password" value="....."/>
New Username	<input type="text"/>
New Password	<input type="password"/>
Confirm New password	<input type="password"/>
<div>Save   Reset</div> <p>Note1: The username and the password can consist only of numbers, letters or the underline.</p>	

Figure 3-37 Password Changing Interface

See Figure 3-37 for the Password Changing interface where you can change username and password of the gateway. Enter the current password, the new username and password, and then confirm the new password. After configuration, click **Save** to apply the new username and password or click **Reset** to restore the configurations. After changing the username and password, you are required to log in again.

### 3.6.16 Restart

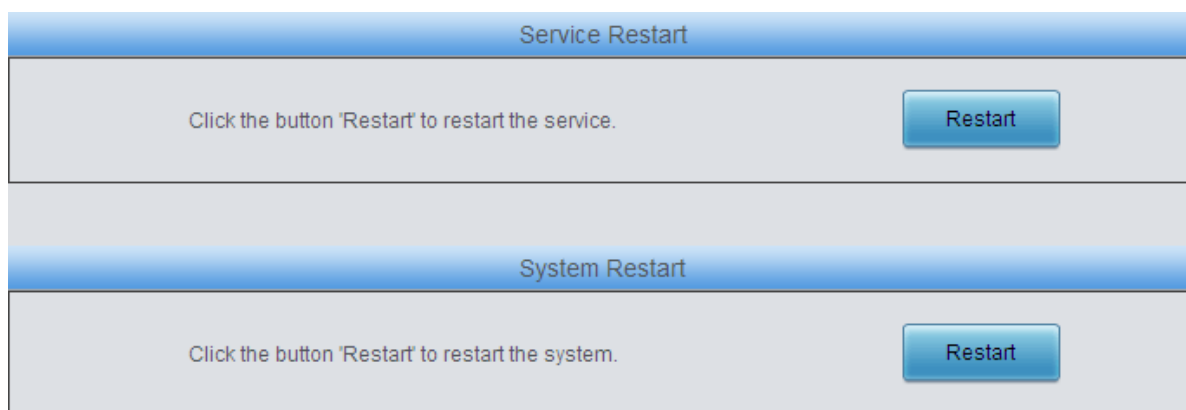


Figure 3-38 Service/System Restart Interface

See Figure 3-38 for the Restart interface. Click **Restart** on the service restart interface to restart the gateway service or click **Restart** on the system restart interface to restart the whole gateway system.

# Appendix A Technical Specifications

## Dimensions

440×88×472 mm<sup>3</sup>

## Weight:

UMG1000-D16: about 0.5kg

UMG3000-B1/B2/B4: about 1.0kg

Uniway2200 (one switching board included):  
about 7.5kg

## Environment

Operating temperature: 0°C—40°C

Storage temperature: -20°C—85°C

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

## LAN

2 (10/100 BASE-TX (RJ-45))

Self-adaptive bandwidth supported

Auto MDI/MDIX supported

## Console Port

Amount: 1 (RS-232)

Baud rate: 115200bps

Connector: Mini USB connecting line

Data bits: 8 bits

Stop bit: 1 bit

Parity unsupported

Flow control unsupported

Note: Follow the above settings to configure the console port; or it may work abnormally.

## Power Requirements

Input power:

100~240V AC (Uniway2200)

18~75V DC (Uniway2200-X with DC power)

Maximum power consumption: ≤360W

## Signaling & Protocol

SS7: TUP, ISUP

ISDN: ISDN User Side, ISDN Network Side

SS1: SS1 Signaling

SIP signaling: SIP V1.0/2.0, RFC3261

## Audio Encoding & Decoding

G.711A 64 kbps

G.711U 64 kbps

G.729A/B 8 kbps

G.723 5.3/6.3 kbps

G.722 64 kbps

AMR 4.75/5.15/5.90/6.70/7.40/7.9  
5/10.20/12.20 kbps

iLBC 13.3/15.2 kbps

## Sampling Rate

8kHz

## Safety

Lightning resistance: Level 4

## Appendix B Troubleshooting

### 1. What to do if I forget the IP address of the UMG gateway?

Long press the Reset button on the gateway to restore to factory settings. Thus the IP address will be restored to its default value:

Uniway2200 ETH1: 192.168.1.101

Uniway2200 ETH2: 192.168.0.101

### 2. In what cases can I conclude that the UMG gateway is abnormal and turn to Synway's technicians for help?

- a) During runtime, the run indicator does not flash or the alarm indicator lights up or flashes, and such error still exists even after you restart the device or restore it to factory settings.

Other problem such as failed registrations is probably caused by configuration errors. We suggest you refer to [Chapter 3 WEB Configuration](#) for further examination. If you still cannot figure out or solve your problems, please feel free to contact our technicians.

### 3. What to do if I cannot enter the WEB interface of the UMG gateway after login?

This problem may happen on some browsers. To settle it, follow the instructions here to configure your browser. Enter 'Tools > Internet Options > Security Tab', and add the current IP address of the gateway into 'Trusted Sites'. If you change the IP address of the gateway, add your new IP address into the above settings.



## Appendix C Technical/sales Support

Thank you for choosing Synway. Please contact us should you have any inquiry regarding our products. We shall do our best to help you.

### **Headquarters**

Synway Information Engineering Co., Ltd

<http://www.synway.net/>

9F, Synway D&R Center, No.3756, Nanhuan Road, Binjiang District,  
Hangzhou, P.R.China, 310053

Tel: +86-571-88860561

Fax: +86-571-88850923

Wechat QR Code: Scan the QR code below to add us on Wechat.



### **Technical Support**

Mobile: +86-18905817070

Email: [techsupport@sanhuid.com](mailto:techsupport@sanhuid.com)

Email: [techsupport@synway.net](mailto:techsupport@synway.net)

### **Sales Department**

Tel: +86-571-88860561

Tel: +86-571-88864579

Fax: +86-571-88850923

Email: [sales@synway.net](mailto:sales@synway.net)