

Quick Installation Guide

- ☑ UC2000-VE
- ☑ UC2000-VF
- ☑ UC2000-VG
- ☑ UC2000-VH

Thanks for Choosing Dinstar's Wireless VoIP Gateway!

Please read this guide carefully before installing the gateway. If you need any technical support, please contact us.

Tel: +86 755 61919966

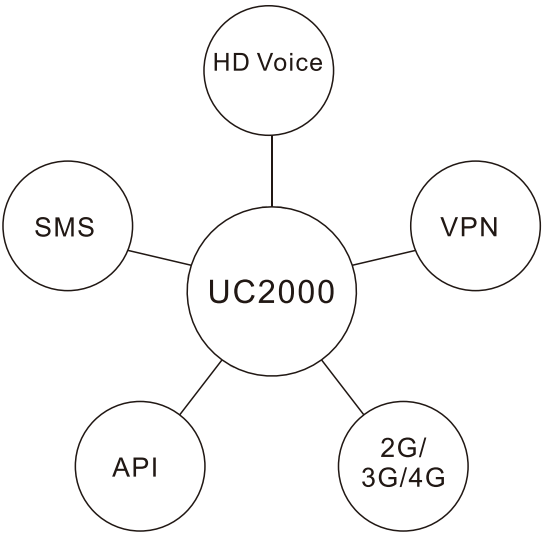
Email: support@dinstar.com

Website: www.dinstar.com

1 Product Overview

UC2000-VE/VF/VG/VH VoIP gateway is a multi-functional gateway used to provide seamless interconnection between GSM/WCDMA/LTE wireless network and IP network. It ensures smooth calling, good voice quality, convenient SMS service, flexible network configuration and other beneficial functions for telecom operators, SMEs and call centers.

The gateway can transmit voice and SMS from IP network to mobile network, and can convert voice and SMS from mobile network or fixed telephone network into IP packages, and then send them to IP network via Ethernet port.



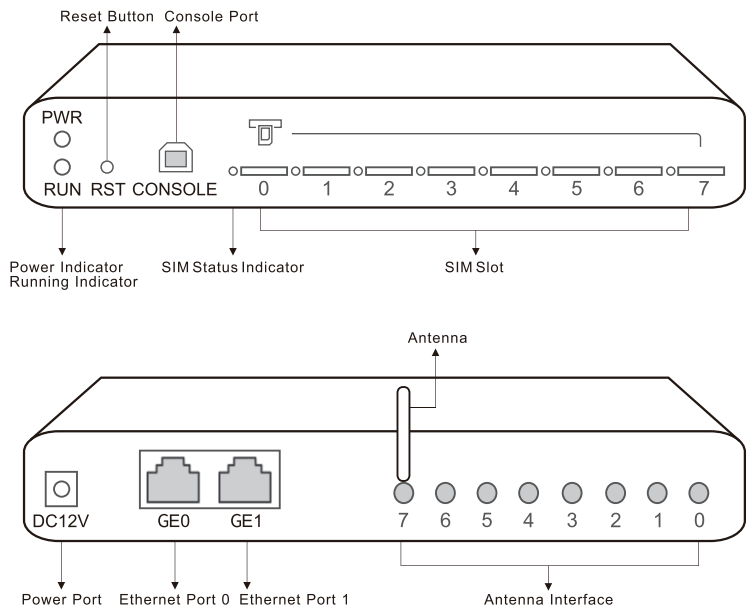
2 UC2000 Models

Model Gateway	4G/T	8G/T	16G/T	32G/T	64G	Multi-SIM
UC2000-VE	✓	✓				
UC2000-VF		✓	✓			✓
UC2000-VG			✓	✓		✓
UC2000-VH				✓	✓	

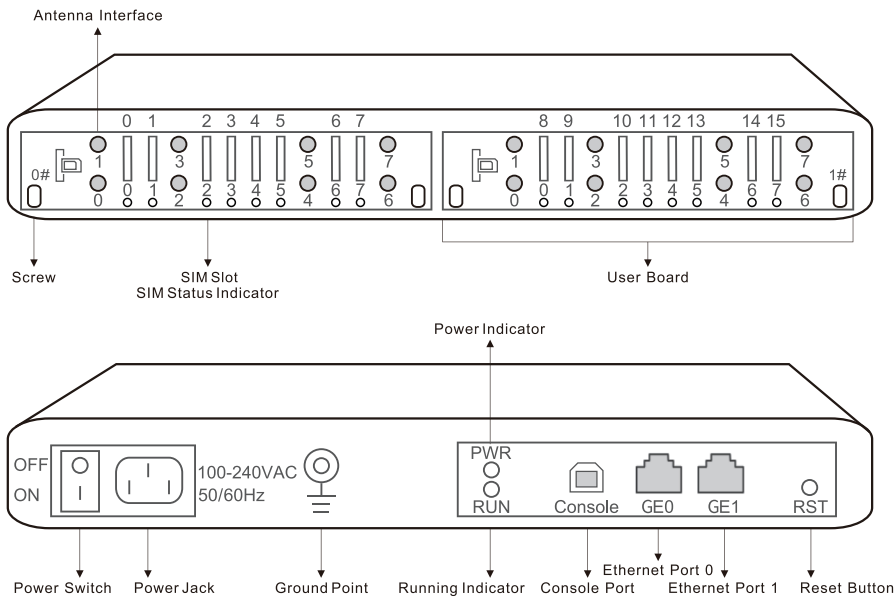
- At present, UC2000-VE/VF/VG/VH gateways support the following mobile networks: GSM (850/900/1800/1900MHz), CDMA(800MHz), WCDMA(850/1900MHz or 900/2100MHz);
- Please check your gateway model and the mobile network it supports before installation.

3 Indicators & Interfaces

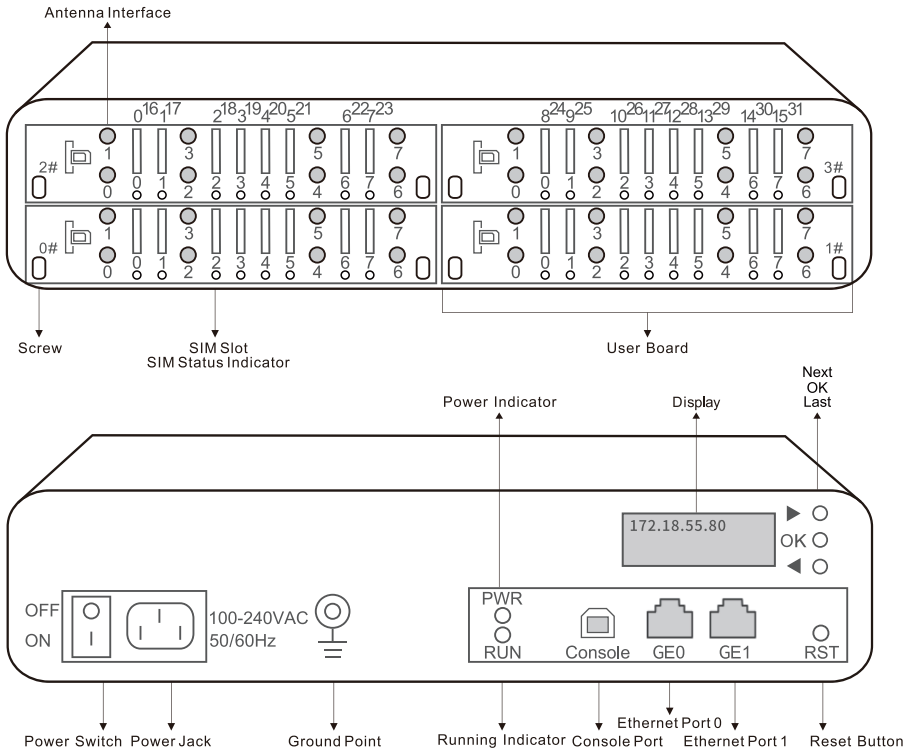
► UC2000-VE



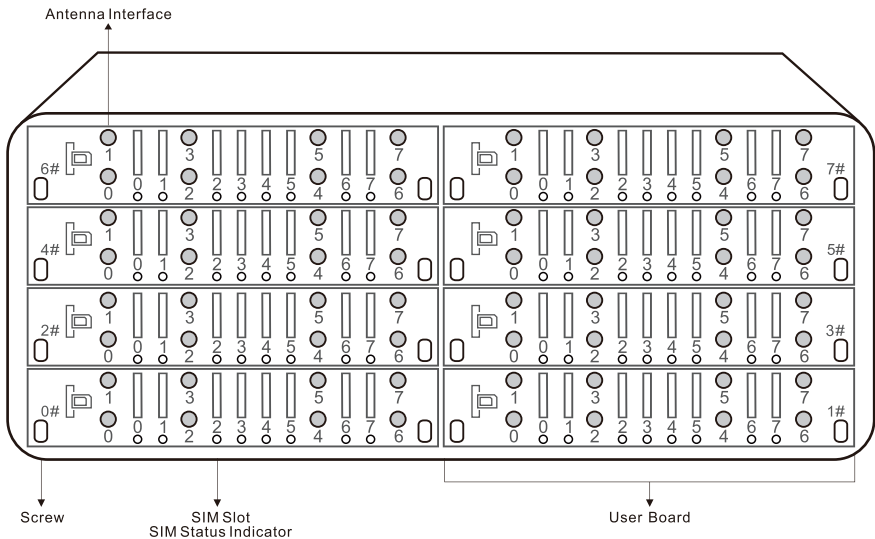
► UC2000-VF

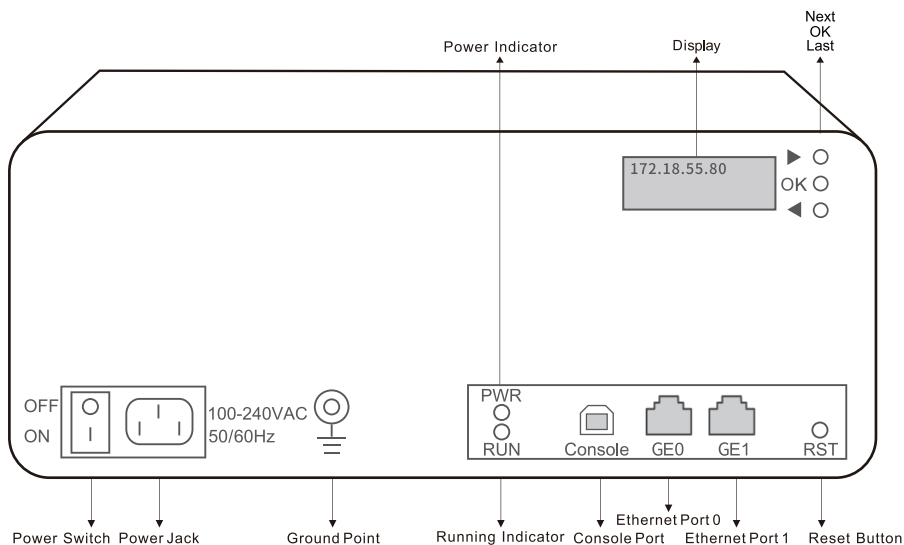


► UC2000-VG

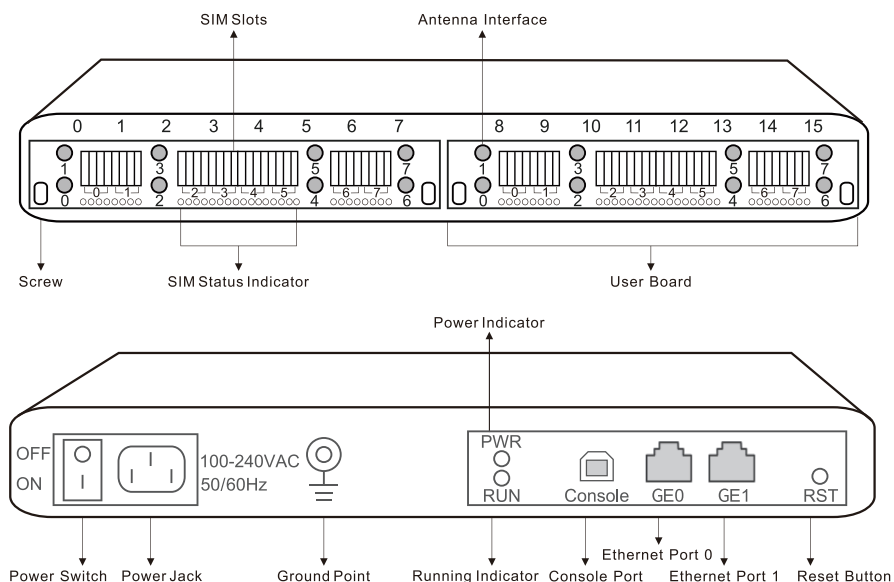


► UC2000-VH

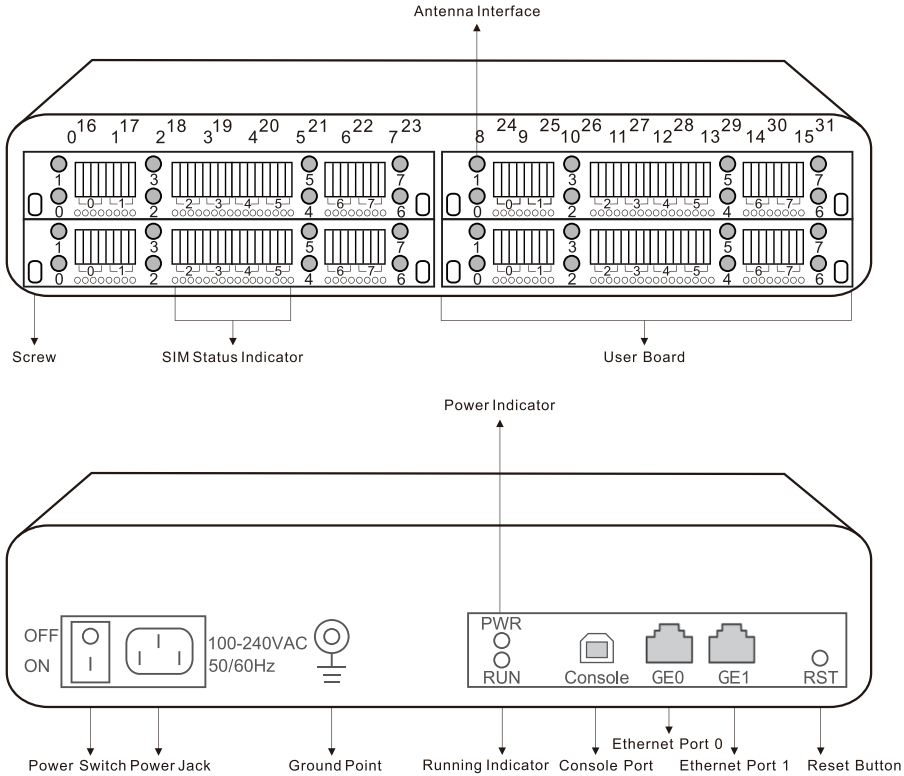




► UC2000-VF(Multi-SIM)



► UC2000-VG(Multi-SIM)



Note: The images above are for your reference only. If there is any inconsistency between actual products and the images above, actual products shall prevail.

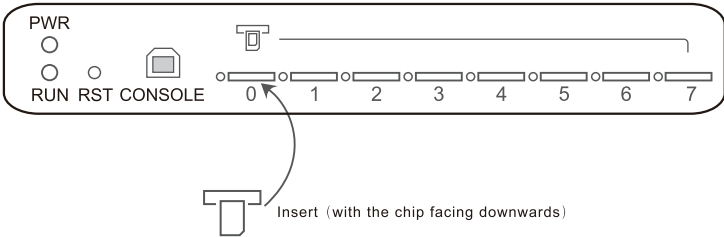
4 Installation Attentions

- ◆ UC2000-VE is equipped with 12V DC power adapter, while UC2000-VF, UC2000-VG and UC2000-VH accept AC input voltage of 100-240V. Please ensure safe and stable power supply;
- ◆ Before you put the gateway into use, please ensure SIM card has been inserted into the gateway, antennas are well-connected to the gateway and network connection is proper.
- ◆ To avoid poor signal strength, please place the gateway away from those objects that can shield signals.
- ◆ Please prevent water from seeping in the gateway during transportation, storage or working time.
- ◆ It's highly advised to horizontally place the gateway on a flat surface or a cabinet.

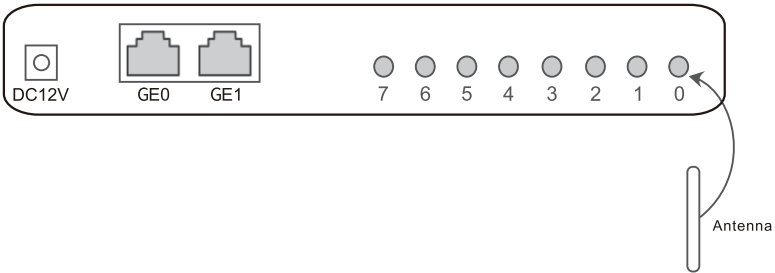
5 Installation Instructions

► Connection Diagram for UC2000-VE

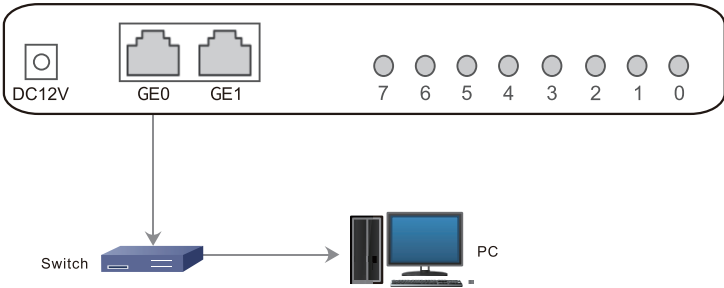
- Insert SIM Card into Gateway



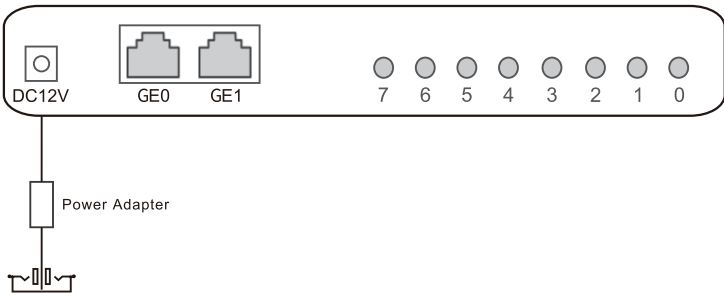
- Connect Antennas to Gateway



- Connect Gateway to Network

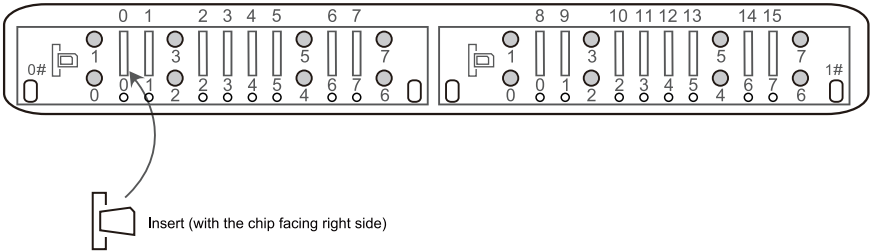


- Connect DC Power Adapter to Power Port of Gateway

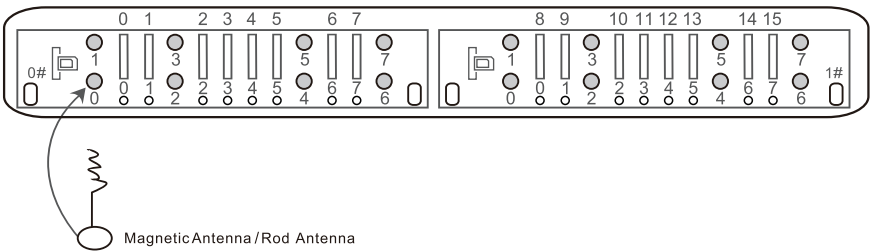


► Connection Diagram for UC2000-VF

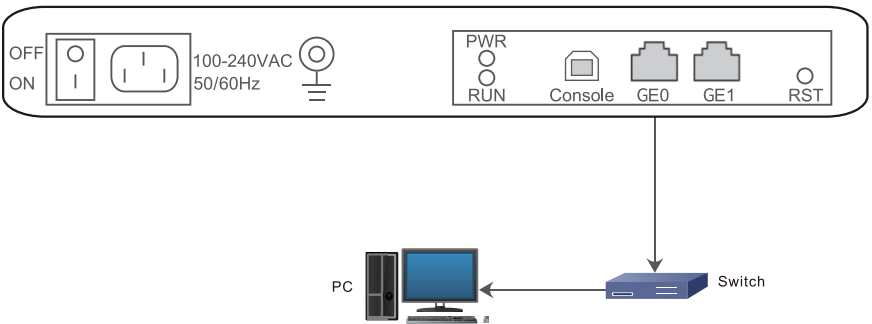
- Insert SIM Card into Gateway



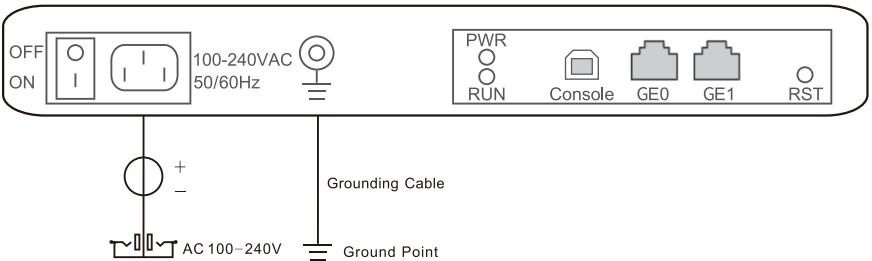
- Connect Antennas to Gateway



- Connect Gateway to Network

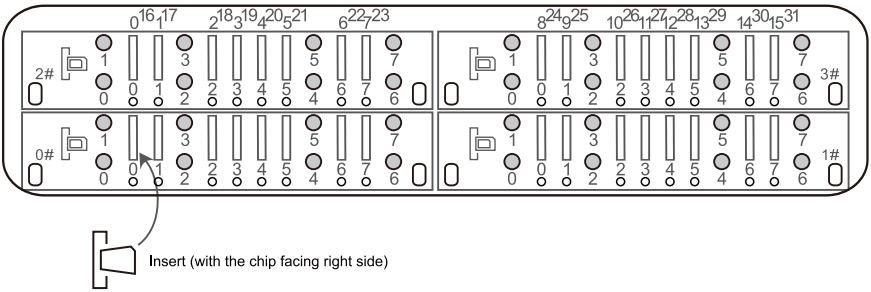


- Connect Gateway to Power Supply

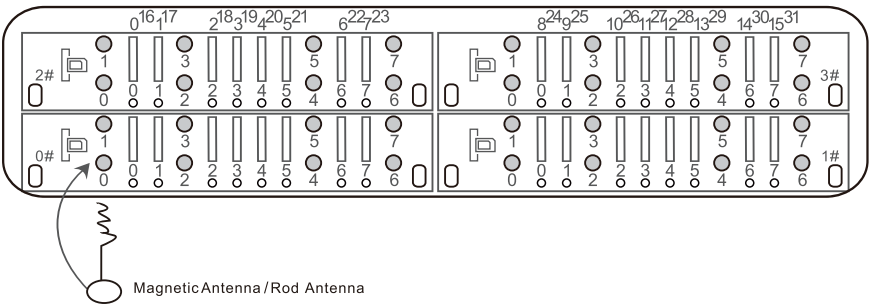


► Connection Diagram for UC2000-VG

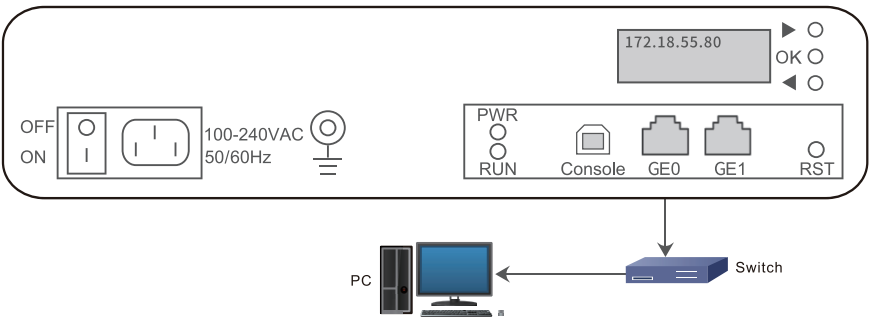
• Insert SIM Card into Gateway



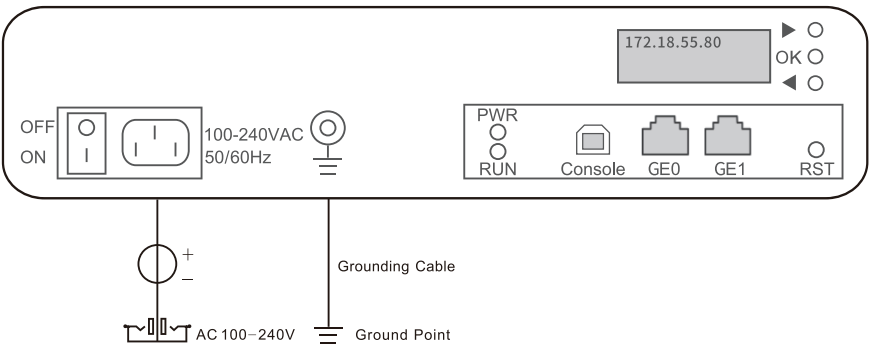
• Connect Antennas to Gateway



• Connect Gateway to Network

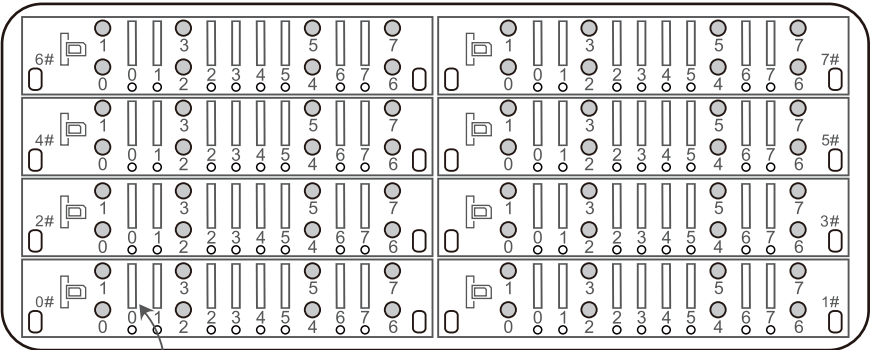


• Connect Gateway to Power Supply



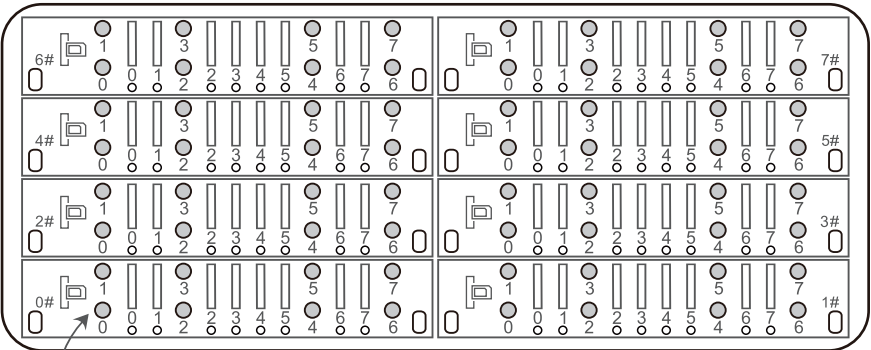
► Connection Diagram for UC2000-VH

- Insert SIM Card into Gateway



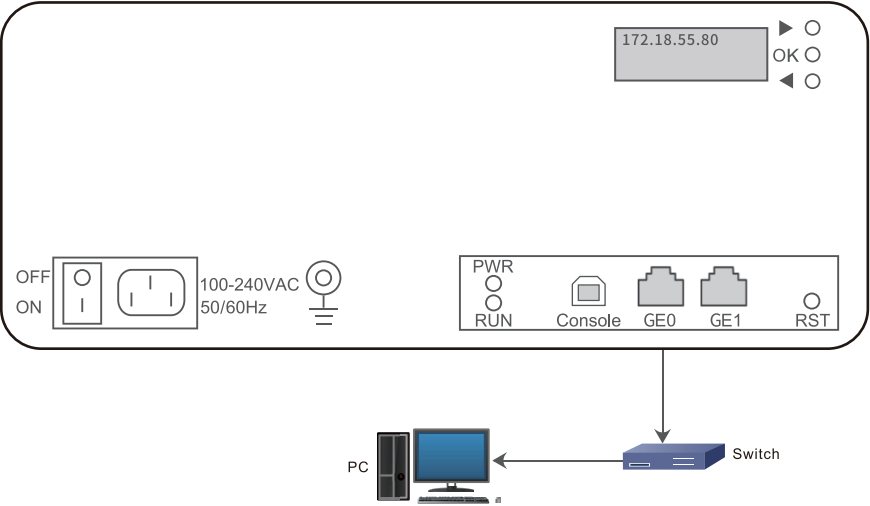
Insert (with the chip facing right side)

- Connect Antennas to Gateway

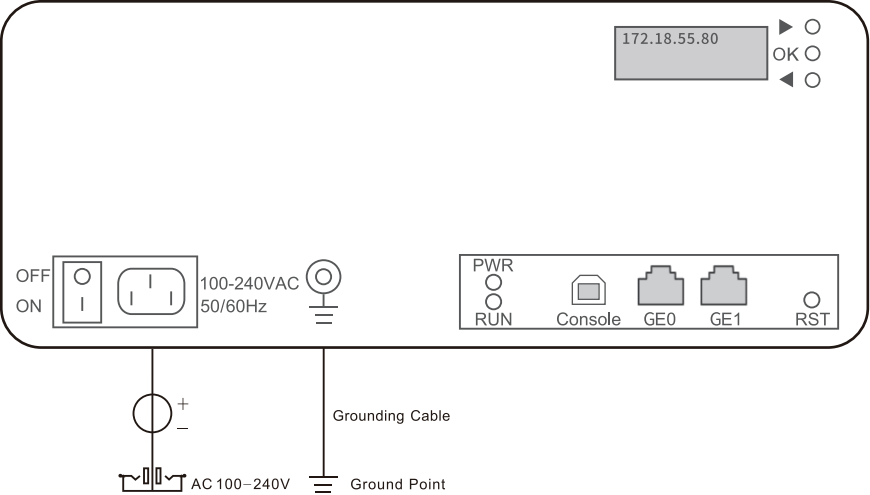


Magnetic Antenna / Rod Antenna

• Connect Gateway to Network

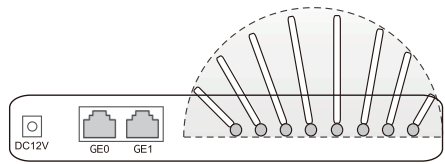


• Connect Gateway to Power Supply

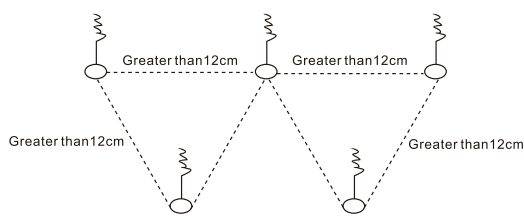


Antenna Installation Tips:

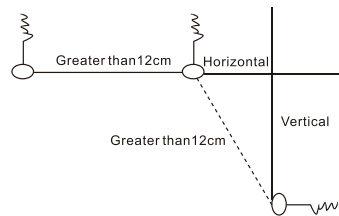
- It's highly suggested that antennas of UC2000-VE be placed into a fan shape as shown in the following figure, so as to strengthen wireless signal.



- When you install antennas to UC2000-VF, UC2000-VG and UC2000-VH, please note that the distance of every two antennas should be greater than 12cm.



▲ Antennas are placed on a same surface

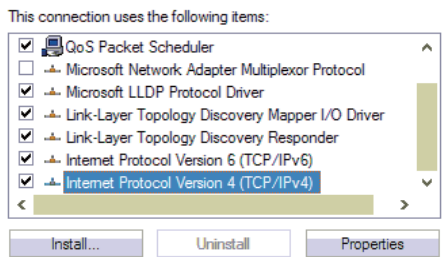
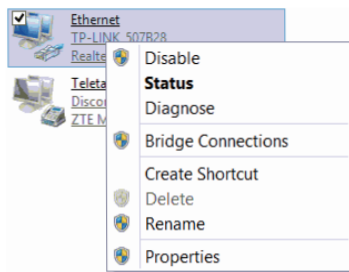


▲ Antennas are placed on different surfaces

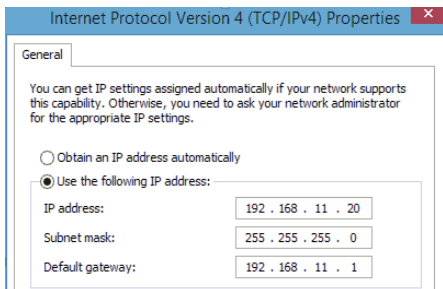
6 Modify PC's IP Address

To log in the Web Interface of the gateway, you need to modify the IP address of PC first to make it at the same network segment with the IP address of the gateway.

- ① On the PC, click 'Network (or Ethernet) → Properties'.
- ② Double-click 'Internet Protocol Version 4 (TCP/IPv4)'.



- ③ Select 'Use the following IP address', and then enter an available IP address '192.168.11.XXX' which is at the same network segment with '192.168.11.1'.



7 Log in Web Interface

Open a web browser and enter the gateway's IP address (default IP is 192.168.11.1). Then input username and password in the displayed login GUI. Both the default username and password are admin.

8 View SIM Status and Signal Strength

After logging in the gateway, click **Mobile Information** to view SIM status and signal strength. Those SIM cards that have been registered are displayed as **Mobile Registered**, while signal strength is marked as **Y**..

Mobile Information													
Port	Type	Network	IMEI	Status	Signal	Call Status	ICCID	IMSI	Opera...	Call Limit	ASR	ACD	POD
0	GSM	GSM	860688043226324	Mobile Registered	Y	Idle	8938003990342112119F	255030008763311	UA-KS	Normal	0	0	0
1	GSM	GSM	860688043227934	Mobile Registered	Y	Idle	8938003990342115781F	255030008763678	UA-KS	Normal	0	0	0
2	GSM	GSM	860688044139914	Mobile Registered	Y	Idle	8938003990342722982F	255030008824398	UA-KS	Normal	0	0	0
3	GSM	GSM	860688044064559	Mobile Registered	Y	Idle	8938003990342112176F	255030008763317	UA-KS	Normal	0	0	0
4	GSM	GSM	860688044129295	Mobile Registered	Y	Idle	8938003990342115591F	255030008763659	UA-KS	Normal	0	0	0
5	GSM	GSM	860688044128958	Mobile Registered	Y	Idle	893800399034272743F	255030008824374	UA-KS	Normal	0	0	0
6	GSM	GSM	860688044129279	Mobile Registered	Y	Idle	8938003990342961333F	255030008848233	UA-KS	Normal	0	0	0
7	GSM	GSM	860688044129311	Mobile Registered	Y	Idle	8938003990342722529F	255030008824352	UA-KS	Normal	0	0	0

9 More Details

This document only provides instructions for quick installation and basic configuration, For detailed configuration and parameter explanation, please make reference to user manual or ask for online technical support.

10 Frequently Asked Questions

- (1) How to query IP address and how to restore the gateway to default settings?

A. Press the RST button for 3-5 seconds, and then the IP address of the gateway will be restored to the default IP address.

B. Press the RST button for more than 7 seconds, the gateway will be restored to factory default settings and all configuration data will be cleared.

C. Log in the gateway via the Console port (both login username and password are admin), set baud rate as '115200bps', and then enter 'show int' into the command-line interface to query the current IP address of the gateway.
- (2) How to find out the reasons why SIM card fails to be registered?

A. Reasons of SIM Card Itself

Check whether the SIM card has been authorized, and then insert it into a mobile phone to see whether it can be registered or not.

Check whether a PIN code is required during the registering of SIM card. If it is needed, please enter one.

B. Reasons of Signal Strength

Check the signal coverage of current environment with a mobile phone.

Check whether the antennas of the gateway are connected properly.

C. Other Reasons

Ask Dinstar's technical support engineer for help.

(3) How to find out the reasons for consecutive call failures?

A. Check SIP Setting

Check whether the gateway has been connected to network?

Check the listening port of SIP is configured correctly.

If the gateway interacts with SIP by registering, please check the corresponding SIM card is registered or not. If the gateway interacts with SIP in an unregistered mode, check whether 'Allow Call without Registration' is enabled or not.

B. Check caller number, called number and routing setting

To check the reason of call failure from local CDR, and then check whether caller number and called number match with the current route.

C. Analyze Syslog

Enable Syslog and then send the traced syslog to technical support engineer for analysis.

(2) How to handle voice problems?

A. There is no voice on both sides

Check whether voice port is enabled and whether it is occupied by other services. Enable NAT traversal like STUN, static NAT or dynamic NAT.

B. There is no voice on single side

If there is no voice on the IP side, check network setting, and enable NAT traversal like STUN, static NAT or dynamic NAT.

If there is no voice on the GSM side, please move the gateway and re-arrange antennas to boost signal strength.

Honest, Concentrated, Innovative, Open

Shenzhen Dinstar Co., Ltd.

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