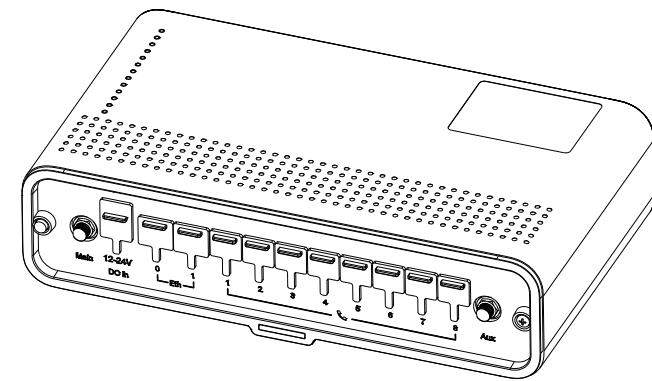


Vola Networks

Quick Installation Guide

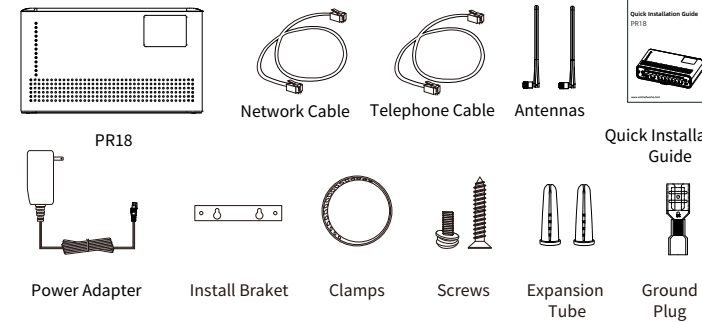
PR18

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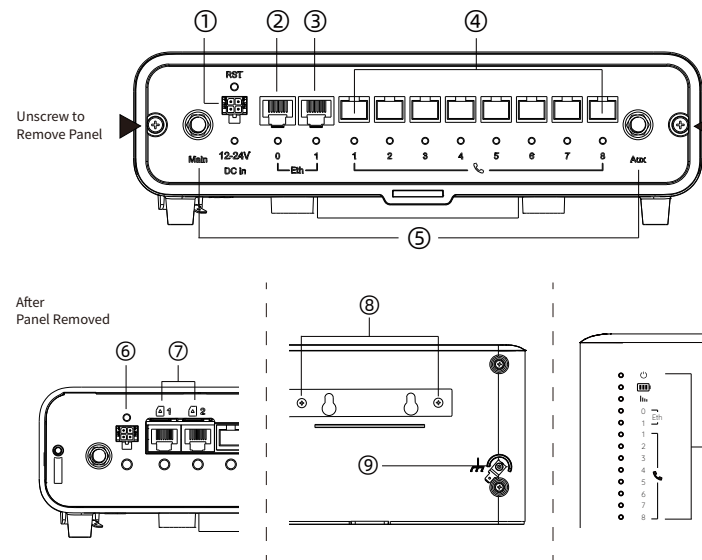


1 Packing list

The following items are included in package. Please contact your service provider, if you find anything missing.



2 Physical Specification



Number	Name	Interface Description
①	Power Port	Connect to 12V DC power adpter included in the package
②	Eth0 Port (WAN)	Connect to upper router/switch to connect o internet (support PoE in)
③	Eth1 Port (LAN)	Connect to other device to provide network/visit web background
④	FXS Ports	Connect to analog phone/Alarm Panel/Fax/modem or other devices
⑤	5G Antenna Ports	Connect to 4G Antennas to receive signal from base station
⑥	Reset Button	Reboot: click the reset button to reboot the device Factory Reset: when in shipping mode *, press the reset button and plug in the adapter while keep pressing, wait for all LED to flash, release the button
⑦	SIM Card Slots	Support inserting 2 SIM cards to use cellular or make VoLTE calls
⑧	Bracket Fixing Hole	Connect to install bracket to fix on vertical surface
⑨	Ground Screw	Connect to earth ground to avoid electric shock impact
⑩	LED Indicators	See the table below to get the description of indicators

*Shipping mode: refer to the last page of this guide to turn off the battery

3 LED Description

Indicators	Status	Description
⏻	Steady Red	Boot Up Failure/POST Failure/Other Error
	Flashing Red	Reboot/Upgrade/Factory Reset
	Steady Green	Device working normally
📶	Steady Red	Weak Signal (Registered with Network)
	Steady Blue	Medium Signal (Registered with Network)
	Steady Green	Good Signal (Registered with Network)
📱	Off	SIM Card Not Recognized/No SIM Card/Not Registered
	Steady Red	Warning (Abnormal Temperature, Voltage...)
🔋	Steady Green	Battery is Full
	Flashing Green	Battery is Charging
	Steady Blue	Battery is Discharging
	Flashing Blue	Battery is Low (≤20%)
	Off	No Battery/Battery Error

Indicators	Status	Description
🌐	Steady Green	Connected, no data transmission
	Flashing Green	Data Transferring
	Off	Not connected
📞	Steady Green	Registered successfully/No Registration Mode (Available Networks)
	Flashing Green(1Hz)	Hook-Off/Voice Mail/Calling
	Flashing Green(5Hz)	Ringing
	Off	Registration Fail/No Registration Mode (Unavailable Networks)

4 Device Installation

Step 1: Insert the SIM Card

Remove the front panel by unscrew the two screws in the bottom. Insert the physical SIM Cards (Nano SIM), if only one SIM Card is used, please insert it in the first slot. When finished, put back the front panel, and tighten the screws

Pay attention to the SIM card orientation!

Step 2: Fix the device to installation site.

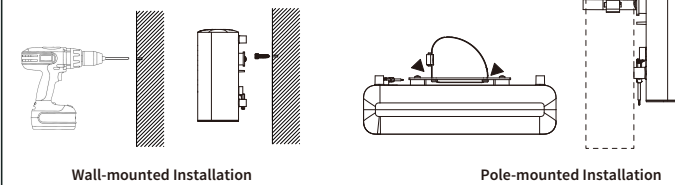
The device support two installation mode, wall-mounted and pole-mounted.

Wall-mounted Installation

- Use the supplied install bracket to align the 2 wall-mounting holes on the plate with the 2 holes on the device on the wall to mark and determine the wall-mounting position of the device;
- Drill 2 screws into the marked position and leave a suitable length to protrude from the wall for hanging device;
- Use the supplied screws to align the 2 screw holes on the device with the holes on the install bracket, and then tighten the screws to fix the bracket;
- Attach the device and align the 2 wall-mounting holes on the plate with the screws on the wall, then pull down the device to secure it.

Pole-mounted Installation

- Install the bracket to the device;
- Use the clamp to pass through the two holes on the install bracket.
- Tighten the screws on the clamp to secure the device on the pole.

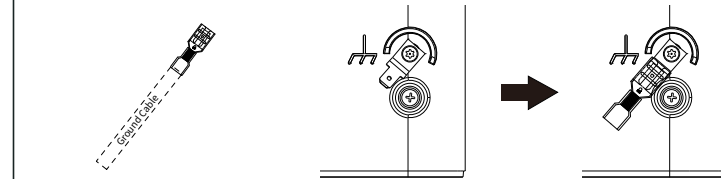


Step 3: Install the antennas

Use the 2 antennas included in the package, tighten and fix them on the port of MAIN and AUX of the device respectively. Adjust the antenna to the desired angle and direction.

Step 4: Connect the Ground Cable

Use the Ground Plug in the package to connect the ground cable, make sure the ground cable is properly connected to Earth Ground or other Grounding potin. Then insert the ground plug.



5 Powering the Device

PR18 supports 2 ways of power supply

- Normal power supply with the power adapter included in the package;
- Connect to PoE switch/PoE Adapter with included RJ45 network cable.

When used with PoE switch/PoE Adpater, make sure it is supporting IEEE 802.3at standard

- If it is powered by PoE: use the network cable that comes with the device, plug one end into the ETH0 port of the device, and connect one end to a device that supports PoE Out, such as PoE switch or PoE Adapter (purchase separately);
 - If it is powered by Power adapter: Connect the power adapter to the 4-pin power port. When you need to use third-party power adapter, please refer to the following description of the Power Port.
- After powering the device, the device will automatically boot up and activate the battery.

4-Pin Power Port Description

PIN	Description
①	RS232 Serial Port, Tx (115200)
②	RS232 Serial Port, Rx (115200)
③	GND
④	Input, 9-24V tolerant, 12V is recommended

Damage to the device caused by connecting the power supply improperly, contrary to the instructions in this manual, is not covered under the device warranty.

6 Using the Device

Configure the device:

Use the network cable to connect the Eth1 port of the device to the WAN port of PC, enter the IP address of the LAN port (default: 192.168.1.1) in the browser, the page will jump to the login interface, input the username and password (admin/last 6 digits of SN number), then you can configure the device via web interface.

Configure the SIM Card:

Normally, the SIM Cards require no extra configuration on APN, if you find your SIM card doesn't work with auto mode Navigate to NR -> APN

- Select the SIM card to configure;
- Fill in the corresponding parameters provided by your cellular plan provider or IT administrator;
- Click "Save".

Register to SIP server:

Navigate to Phone -> VoIP

- Select the corresponding port to configure;
- Select "Enable" to enable the port;
- Fill in the SIP registration parameters provided by your phone provider or IT administrator;
- Click "Save" and wait for reboot.

Please refer to the following sheet to finish the configuration.

Parameters Name	Description	Parameters Name	Description
Port Enable	If or not enable the registration of the port	Display Name	The number to display in callee
Proxy Server	The domain name or IP address of SIP server	Phone Number	Number of telephone provided by SIP Proxy
Outbound Proxy	Outbound Proxy IP or domain name	Account	SIP account provided by SIP Proxy
Outbound Port	Outbound Proxy's Service port	Password	SIP password provided by SIP Proxy
Proxy Server Port	The port which SIP Server supports for VoIP service, default is 5060		
Proxy Server Transport	The transport protocol used with the proxy server, should match the setting of your SIP provider		
Server Domain	This configure the address for DNS SRV, the result will be added to SIP FQDNServer for SIP server connection. Available only when Outbound/Backup Outbound server are both empty		

Using with different analog terminal

Navigate to Phone -> POTS Application

Terminal Type: Alarm

If your alarm panel support contact ID, select "ContactID_Relay" .If not, please refer to docs.volanetworks.com for more details;

Terminal Type: Fax

If your Fax machine and your SIP provider supports T.38 Fax, enable the T.38;

Terminal Type: Modem

If your modem support V.150 protocol, enable the V.150 and select the corresponding Modem mode.

How to turn off the Battery:
(Enter Shipping Mode)

- Make sure the device is fully boot up, and the power adapter is **disconnected**;
- Long press the reset button for **over 5s** until all LEDs are turned on;
- Release** the Reset button, all LEDs will be turned off;
- The device now enter shipping mode. (If it doesn't work, wait for complete startup and perform it again)