

Installation and Configuration Quick Guide

EG8001

Industrial Elevator Gateway

2xEth + 1xVoice + 2xRS-232 + 1xRS-485 + 1xConsole + 1xUSB Host

Package Contents

Before installing the EG8001 Gateway, verify the kit contents as following.

- 1 x Robustel EG8001 gateway
- 1 x 2-pin 3.81mm pluggable terminal block for power

Optional Accessories (sold separately)

- SMA cellular antenna (3G/4G) magnet antenna
- 35 mm DIN rail mounting kit
- Power cable
- Serial cable
- Audio cable

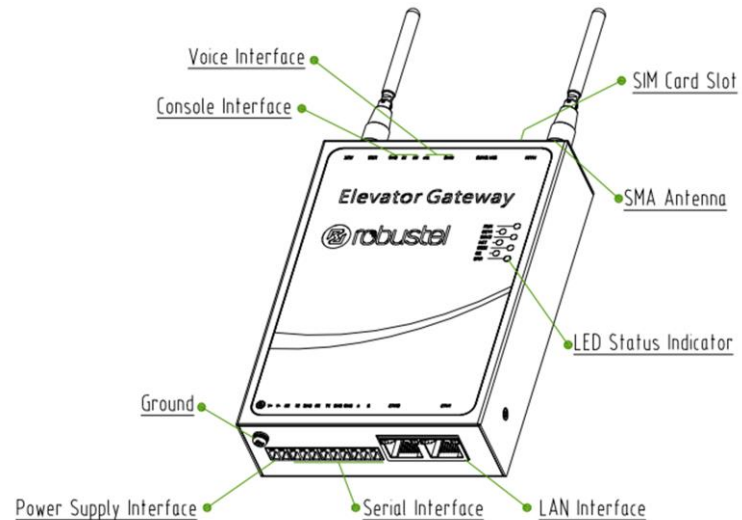
***If any of the above items is missing or damaged, please contact your Robustel sales representative.**

Environmental Requirements

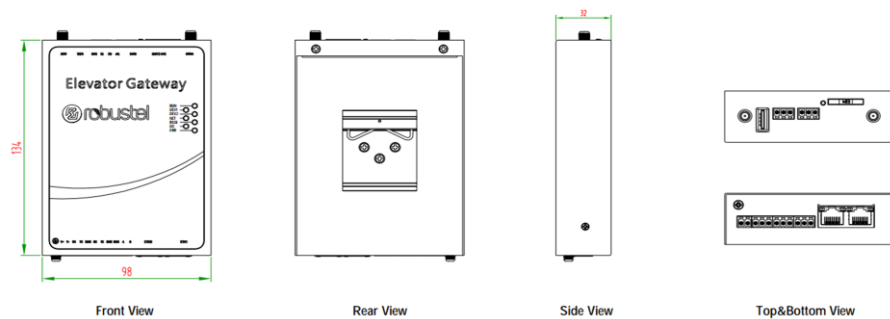
- Power input: 9 to 36V DC
- Power consumption: 100 mA@12 V in idle state, 400 mA (peak) @12 V in communication state
- Operating temperature: -40 °C to 75 °C
- Relative humidity: 5% to 95% RH

Hardware Introduction

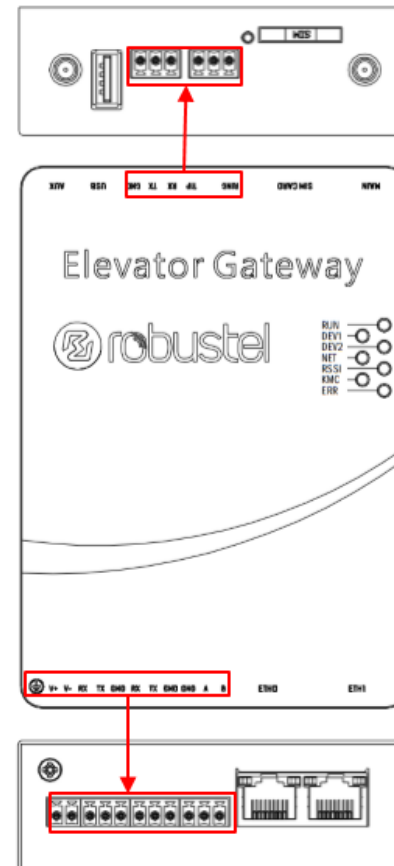
1. Overview



2. Dimensions



3. Pinouts



XRS4 (Debug)		
PIN	Function	Direction
1	RX	Device→ EG9012
2	TX	EG9012→Device
3	GND	--

XIT (FXS)		
PIN	Function	Direction
1	RING	Device→ EG9012
2	--	
3	TIP	EG9012→Device

XPSW (Power supply interface)		
PIN	Function	Direction
1	V+	Adapter→ EG8001
2	V-	EG8001→Adapter

XRS1/XRS2 (RS232 serial port)		
PIN	Function	Direction
1	RX	Device→ EG8001
2	TX	EG8001→Device
3	GND	--

XRS3 (RS485 serial port)		
PIN	Function	Direction
1	GND	--
2	A	--
3	B	--

4. LED Indicators

Name	Color	Status	Description
RUN	Green	On	Gateway is running
DEV1	Green	On	Connected to controller1
DEV2	Green	On	Connected to controller2
NET	Green	Always On	Connected to 4G network
		Blinking every 100ms	Connected to 3G network
		Blinking every 1s	Connected to 2G network
RSSI	Green	Blinking every 1s	Signal level: 0-9 (Low Signal)
		Blinking every 100ms	Signal level: 10-19 (Medium Signal)
		Always on	Signal level: 20-31 (High Signal)
		Off	No signal
DC	Green	On	Connected to the Data Center
ERR	Green	On	Gateway in fault

5. USB Interface

Function	Operation
Firmware upgrade	USB interface is used for batch firmware upgrading, but cannot be used for sending or receiving data from slave devices which connected to it. You can insert a USB storage device into the router's USB interface, such as a U disk or a hard disk. If there have a supported configuration file or a EG8001 firmware in this USB storage device, the EG8001 router will automatically update the configuration file or the firmware.

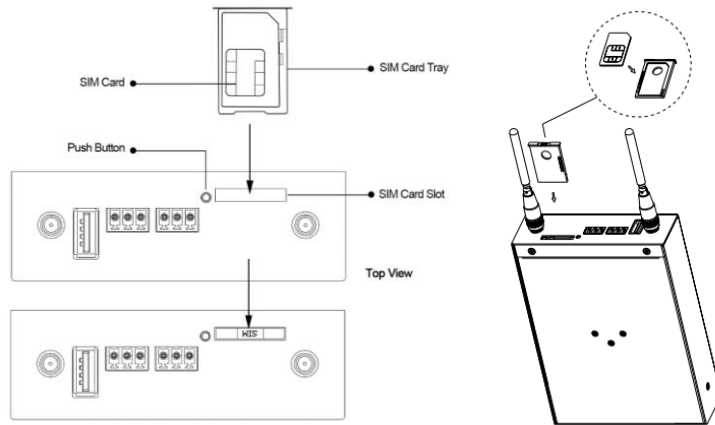
6. Ethernet Ports

Each Ethernet port has two LED indicators (please check the picture above). The yellow one is Speed indicator and the green one is Link indicator. There are three status of each indicator. For details please refer to the form below.

Indicator	Status	Description
Speed Indicator	Off	10 Mbps mode.
	On	100 Mbps mode.
Link Indicator	Off	Connection is down.
	On	Connection is up.
	Blink	Data is being transmitted

Hardware Installation

1. Insert or Remove SIM Card



- **Inserting SIM Card**

1. Power off the gateway.
2. Use a pointed stick to press the Push Button, and then take out the SIM Card Tray.
3. Place the SIM card on the tray, and insert them to the slot until you hear “a cracking sound”.

- **Removing SIM card**

1. Power off the gateway.
2. Press the Push Button, and the tray with SIM card will pop up to be pulled out.

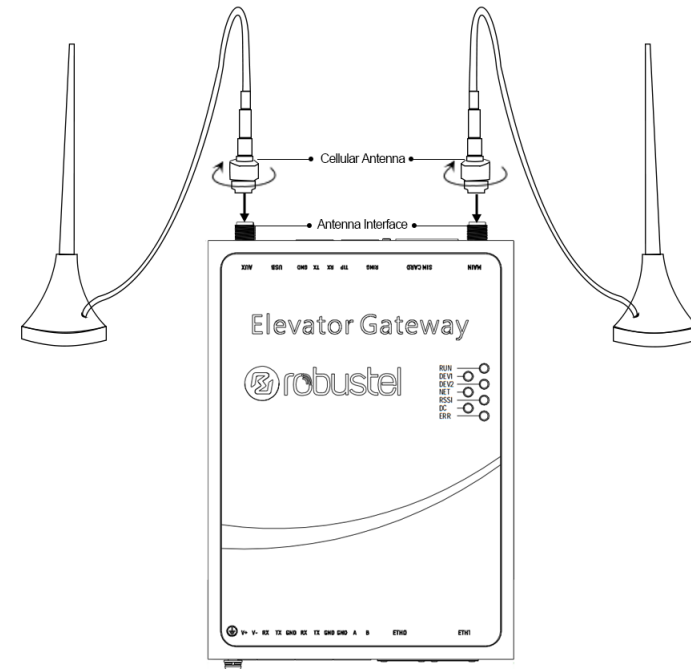
Note:

1. Don't touch the metal surface of the SIM card in case information in the card is lost or destroyed.
2. Don't bend or scratch your SIM card. Keep the card away from electricity and magnetism.
3. Make sure to disconnect the power source from your gateway before inserting and removing your SIM card.

2. Attach External Antenna (SMA Type)

Attach an external SMA antenna to the gateway's connector and twist tightly. Make sure the antenna is within the correct frequency range provided by the ISP and with 50 Ohm impedance.

Note: Recommended torque for tightening is 0.35 N.m.

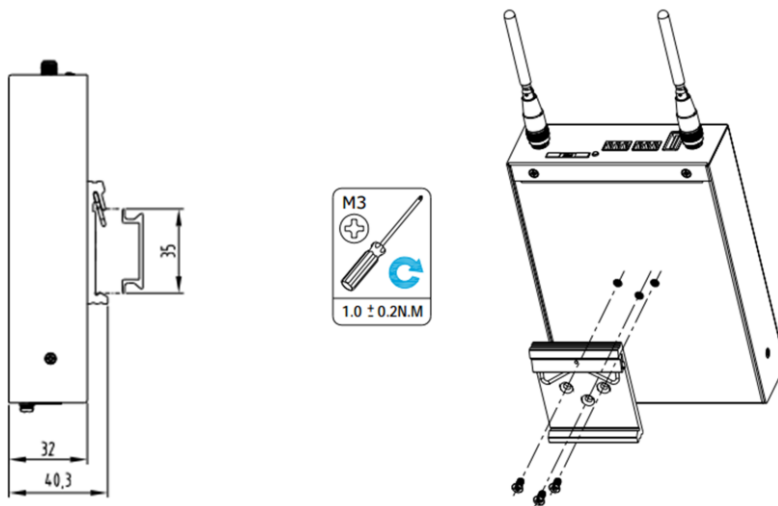


3. Mount the Gateway

Use 3 pcs of M3*6 flat head Phillips screws to fix the DIN rail to the gateway, and then hang the DIN rail on the mounting bracket. It is necessary to choose a standard bracket.

Note: Recommended torque for mounting is 1.0 N.m, and the maximum allowed is 1.2 N.m.

Din Rail



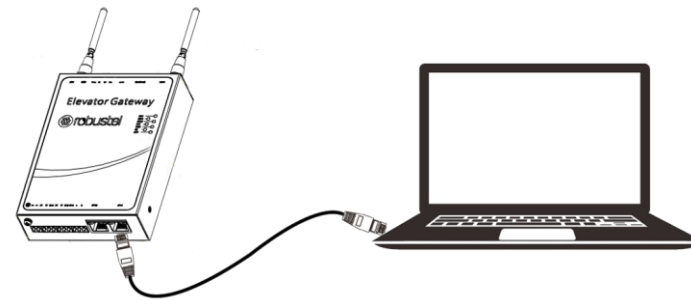
4. Ground the Gateway

Gateway grounding helps prevent the noise effect due to electromagnetic interference (EMI). Connect the gateway to the site ground wire by the ground screw before powering on.

Note: This product is appropriate to be mounted on a sound grounded device surface, such as a metal panel.

5. Connect the Gateway to a Computer

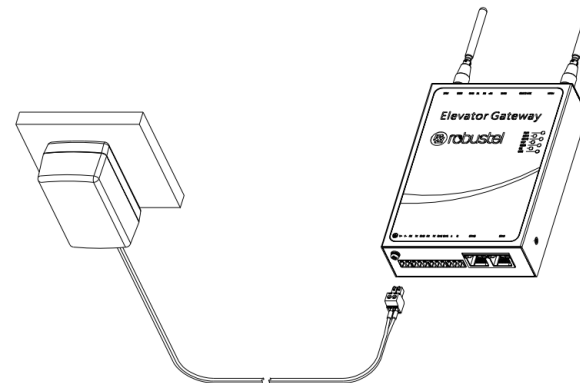
Connect an Ethernet cable to ETH0 or ETH1 at the bottom of the EG8001, and connect the other end of the cable to your computer.



6. Power Supply

EG8001 Gateway supports reverse polarity protection, but always refers to the figure above to connect the power adapter correctly.

Note: The range of power voltage is 9 to 36V DC.

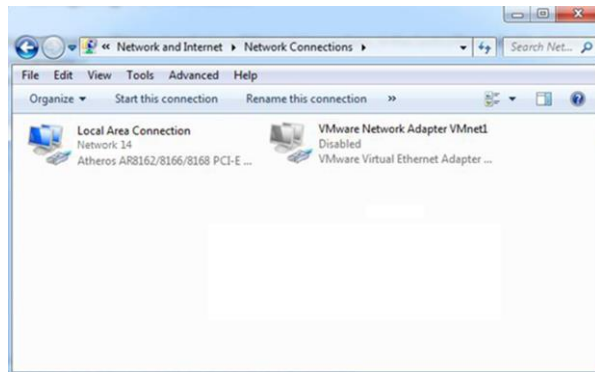


Configure the PC

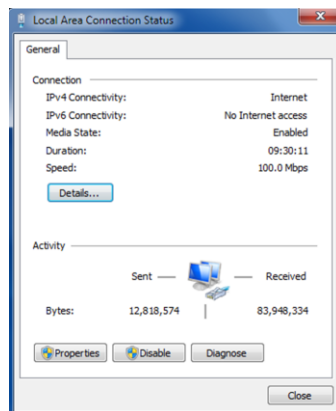
There are two methods to get IP address for the PC, one is to obtain an IP address automatically from “Local Area Connection”, and another is to configure a static IP address manually within the same subnet of the Gateway. Please refer to the steps below.

Here take **Windows 7** as example, and the configuration for windows system is similar.

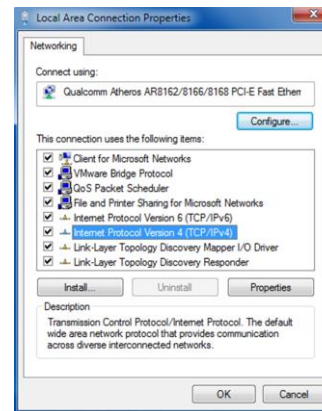
1. Click **Start > Control panel**, double-click **Network and Sharing Center**, and then double-click **Local Area Connection**.



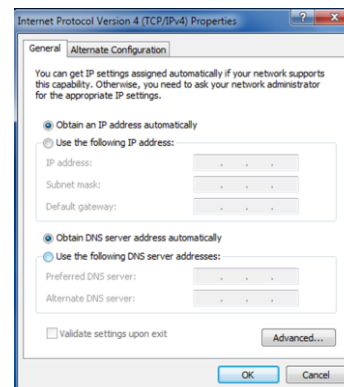
2. Click **Properties** in the window of **Local Area Connection Status**.



3. Choose **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.

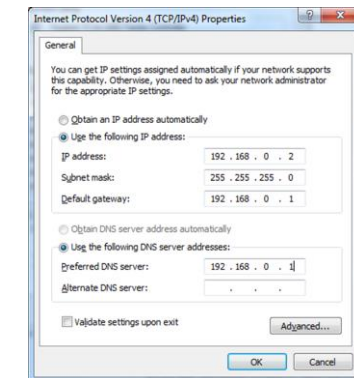


4. Two ways for configuring the IP address of PC
Obtain an IP address automatically:



Use the following IP address:

(Configured a static IP address manually within the same subnet of EG8001 Gateway)



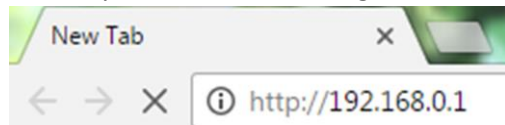
5. Click **OK** to finish the configuration.

Configure the Gateway

1. Log in the Gateway

To log in to the management page and view the configuration status of your Gateway, please follow the steps below:

1. On the PC, open a web browser such as Internet Explorer, Google and Firefox etc.
2. From your web browser, type the IP address of the Gateway into the address bar and press enter. The default IP address of EG8001 Gateway is 192.168.0.1, though the actual address may vary



3. In the login page, enter the username and password, choose language and then click **LOGIN**.



Note: If enter the wrong username or password over six times, the login web will be locked for 5 minutes.

4. After logging in, the home page of the EG8001 Gateway's web interface is displayed, for example.

Note: To configure parameters should follow this order **modify parameter 1 > Submit > modify parameter 2 > Submit > Save & Apply**.



2. Check the Cellular Connection Status

Click **Interface > Cellular > Status** to view the connection status.

Link Manager				
Status				
Link Status				
Index	Link	Status	Uptime	IP Address
1	WWAN1	Connected	0 days, 00:07:53	10.104.244.1..

Click the row of status, the details status information will be displayed under the row.

Link Status				
Index	Link	Status	Uptime	IP Address
1	WWAN1	Connected	0 days, 00:07:53	10.104.244.1..
Index 1				
Link WWAN1				
Status Connected				
Interface wwan1				
Uptime 0 days, 00:07:53				
IP Address 10.104.244.179/255.255.255.248				
Gateway 10.104.244.177				
DNS 210.21.4.130 221.5.88.88				
RX Packets 22				
TX Packets 26				
RX Bytes 2124				
TX Bytes 2690				

3. Configure the IP of the Gateway

There are two Ethernet ports on EG8001 Gateway, including ETH0 and ETH1. The ETH0 and ETH1 can freely choose from lan0~lan1, but at least one LAN port must be assigned as lan0. In another word, ETH0+ETH1 can be configured as lan0+lan0, lan0+lan1, or lan1+lan0. Both of ETH0 and ETH1 default to lan0, and their default IP are 192.168.0.1/255.255.255.0.

Ports			Status
^ Port Settings			
Index	Port	Port Assignment	
1	eth0	lan0	
2	eth1	lan0	

- **Configure lan0**

Click **Interface > LAN > LAN**, click lan0's edit button to configure its configuration, and modify its IPv4 address and Netmask.

LAN				Multiple IP	VLAN Trunk	Status
^ Network Settings						
Index	Interface	IP Address	Netmask			
1	lan0	192.168.0.1	255.255.255.0			

Click lan0's edit button and configure its parameters in the pop up window.

LAN	
^ General Settings	
Index	1
Interface	lan0
IP Address	192.168.0.1
Netmask	255.255.255.0
MTU	1500

When finished, click **Submit > Save & Apply** for the configuration to take effect.

- **Configure lan1**

Click **Interface > Ethernet > Ports**, click eth1's edit button, choose lan1 as the assigned port, and click "Submit".

Note: By default, there is a LAN port (lan0) in the list. To begin adding a new LAN port (lan1), please configure eth0 or eth1 as lan1 first in **Ethernet > Ports > Port Settings**. Otherwise, the operation will be prompted as "List is full".

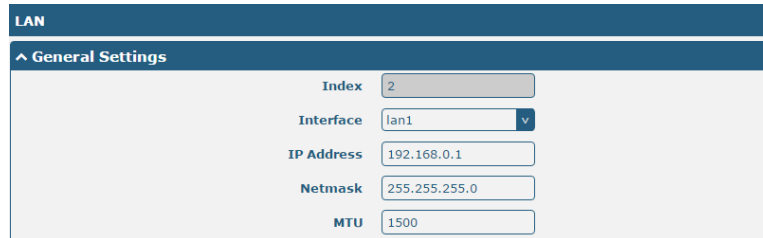
Ports			Status
^ Port Settings			
Index	Port	Port Assignment	
1	eth0	lan0	
2	eth1	lan0	

^ Port Settings			
Index	2		
Port	eth1		
Port Assignment	lan1	lan0	
	lan1		
		Submit	Close

Click **Interface > LAN** in the homepage, and click the add button.

LAN				Multiple IP	VLAN Trunk	Status
^ Network Settings						
Index	Interface	IP Address	Netmask			
1	lan0	192.168.0.1	255.255.255.0			
2	lan1	192.168.0.1	255.255.255.0			

Choose lan1 as the interface, and configure its IPv4 address and Netmask.






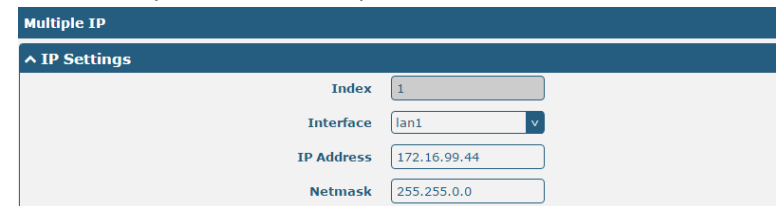
When finished, click **Submit > Save & Apply** for the configuration to take effect.

- **Configure Multiple IP**

Click **Interface > LAN > Multiple IP**, and click the edit button of lan0.



Note: You may click  to edit the multiple IP of the LAN port, or click  to delete the multiple IP of the LAN port. Now, click  to add a multiple IP to the LAN port.



When finished, click **Submit > Save & Apply** for the configuration to take effect.



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