

# **GDX IP Gateway**

P/Ns: GDX-MGT-MD-GW-IP-KT GDX IP Gateway with 4G modem GDX-MGT-GW-IP-MNT GDX IP Gateway with mounting plate

# Setup Guide Oct 2024

Doc ref: GGW\_SG\_v2



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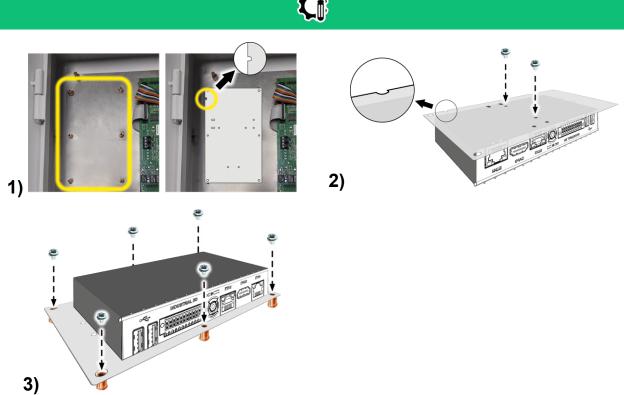




# P/N: GDX-MGT-MD-GW-IP-KT & GDX-MGT-GW-IP-MNT







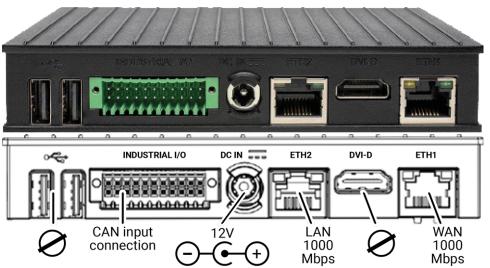




# 1.0 Gateway Layout



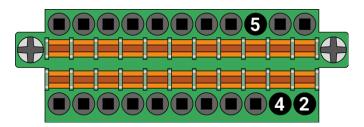
FRONT VIEW



REAR VIEW

## 2.0 CAN Bus Connector

## Pin numbering FRONT SIDE



PIN 2: CAN\_L

PIN 4: CAN\_H

PIN 5: ISO\_GND\_A



To insert wires into the CAN Input Connection push the spring cage release for the indicated PINs.



### 3.0 Set up instructions

Installations with broadband connectivity can ignore the Modem installation section.

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The Gateway <u>MUST</u> be associated with an Estate in Housing Central before it can be commissioned on site.

### 4.0 Modem – Remote survey steps

- Comelit-PAC are not responsible for guaranteeing signal strength, quality or reliability. These steps are suggestions only and not an exhaustive list.
- Before installing any modems we recommend the installer completes a mobile signal survey of the site to identify potential issues.
- A signal analyser is an ideal tool to determine signal strength and quality.

Signal variable	Optimal outcome
SIM inserted and modem powered on	4G network detected with 5 bars
Modem CSQ (RSSL) value	Signal analyser shows CSQ ≥ 23
Modem RF Absolute Power (dBm)	Signal analyser shows signal strength ≥ -65dBm

See Troubleshooting section for possible solutions.

#### 5.0 Modem - Installation



Perform a site survey to check the radio signal reception is strong enough for communications.

#### Power up the modem.

For installations where broadband connectivity to a Gateway is not possible please follow these steps.

- POWER UP THE MODEM FIRST.
- 2. Wait for the mobile network signal connection to register.
- 3. Check the signal strength and quality using the Remote Survey steps.
- 4. Follow Gateway installation steps.



## 6.0 Gateway Installation

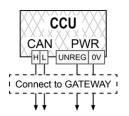


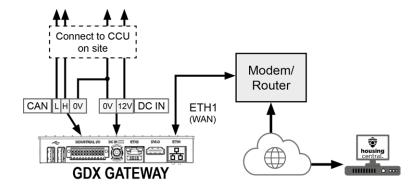
#### For retro fitting in a VoIP/GSM unit enclosure we recommend the following:

- · Use double-sided velcro pads/tape to secure the units to the back of the enclosure
- · Do NOT stack the units on top of each other
- · Use the antenna or network cable exit point as cable knockouts



Linecard connections on CCU

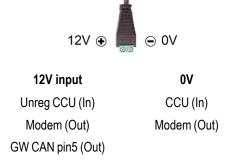




#### Power up the gateway.

- Connect CAN and power adaptor to the CCU UNREG (12V) & 0V.
- 2. Insert the power supply adaptor into the **DC IN** jack.
- 3. Turn the adaptor clockwise to lock.
- 4. Press the Power button to turn the Gateway on.
- 5. The Gateway Power LED will be GREEN.

Maximum current draw <u>must not</u> exceed the power source rating.





#### To power OFF the Gateway press and hold the Power button.

#### 6. Status LEDs will show:

LED1	Status	Info
GREEN	Flashing	Application starting
GREEN	Solid	Application is up
RED	Flashing	Application down, rebooting

LED2	Status	Info
GREEN	Flashing (both ETH1 and ETH2)	Up and functional
GREEN	Solid	WAN connected
RED	Flashing	WAN disconnected





#### 7.0 Spare serial number labels



There are TWO Gateway spare serial number labels included. Please use for your records and/or installation identification.

To make the installation process easier, please attach the labels to the cabinet and / or commissioning paperwork. By using these labels the installation engineer will improve the accuracy of records keeping and speed up the installation process.

## 8.0 Connection to Housing Central

Once the Gateway (and modem) are connected to the network, log in to Housing Central to configure the final communication step.

Follow the steps below to add Gateways.

- 1. Login to Housing Central.
- 2. If required, follow steps from Housing Central Help in **Properties** section **Add Estate**.
- 3. Select **HARDWARE > Gateways** from the navigation menu.
- 4. Click Add Gateway.
- 5. Complete the required fields in the **Details** page using the Gateway Serial Number (can be found on the gateway or on the spare serial number labels provided in the original packaging.)
- 6. Click Save to save the new details and return to the Gateways list.



#### **GATEWAY INSTALLATION IS COMPLETE**



For more information, see Troubleshooting at rear of guide.





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# **OPTIONAL – Change Gateway password**

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Please consult with your local IT / Housing Central admin team BEFORE changing this password.

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The default password can be changed on the Gateway and MUST also be updated in Housing Central to maintain the communications.

- 1. Connect a network cable between the LAN input (ETH2) of the Gateway device and your laptop.
- 2. Configure the laptop network adaptor to 192.168.0.x (the same range as the Gateway).
- 3. Open a browser and navigate to http://192.168.0.1:5001/ in the browser.
- 4. Login with these credentials:

Username: **sysadmin** Password: **gateway1** 

5. The following screen will be shown.



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- 6. Click Stop.
- 7. Select the **Settings** option.
- 8. Choose **Set Gateway Password** from the dropdown.
- 9. The minimum password string length is '7' printable characters.
- 10. Click Set.
- 11. The gateway will change to the Gateway Configuration page.
- 12. Click the **Home** option.
- 13. Click Start.



Remember to change the password in Housing Central to match the Gateway password.

- 14. Login to Housing Central.
- 15. Select **HARDWARE > Gateways** from the navigation menu.
- 16. Click the **Set Password** link under the relevant gateway.
- 17. Enter the same password used in step 9 above.
- 18. Click **Save** to confirm the details and the Gateway will synchronise.
- 19. The Sync Status will change from Unknown to Connected.





#### **TROUBLESHOOTING**

### **Gateway connectivity**

- Confirm the Gateway Serial Number matches the Estate association in Housing Central.
   (See Gateway Configuration Event Log for more details)
- The Gateway password must match the Housing Central Gateway password. Reset the
  password on the Gateway and ensure the same password is set in Housing Central. (See
  Change Gateway password for more details)
- Recyle power: Remove adaptor plug from Gateway and wait 2 mins before restarting.

### **Modem connectivity**



Do NOT install the antenna inside a metal enclosure or on metal work.

Ensure the modem is fully powered on and shows 4G network connectivity and strong signal.

Possible resolutions to resolve modern issues can include but are not limited to:

Potential issues	Physical barriers including metal, brick, concrete can inhibit signals.	
	Weather conditions during or after rainfall can affect signal quality.	
	Competing signals should be avoided.	
	Proximity to the transmitter is important.	
	Signal passing through a repeater can reduce the quality of a signal.	
	Transmitter load will significantly reduce signal bandwidth / data rates.	
Possible resolutions	Distance from modem to the antenna < 20m.	
	Use a high gain antenna.	
	Relocate the installation site of the modem.	



After making any adjustment please check signal strength and quality with the analyser tool.

# Modem network and strength

#### **General advice**

· Power down modem, reinsert SIM and reset.

#### < 5 signal bars on modem

- 5 bars shown on the modem will indicate the strongest signal.
- Anything less then 5 bars may indicate weak or unreliable communications.
- · Consider relocating the modem antenna.





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