Technical Documentation



WIRELESS GATEWAY GL-X300B

Wireless Gateway for VISY-Command WEB Installation and configuration



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 1

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1 Introduction

This manual describes how to install and configure the wireless gateway that can be connected to VISY-Command Web. The external wireless gateway enables internet connectivity to a VISY-Command WEB located at forecourts where internet connection via LAN network is not possible.

The wireless gateway uses a SIM-card (should be purchased separately) to connect the VISY-Command WEB to the internet.

This wireless gateway has already been checked for dual use and it complies with the dual use purpose. The product can be ordered using the article number 900243.



2 Scope of wireless gateway

The wireless gateway consists of the following components* :

- 1. GL inet GL-X300B Gateway hardware
- 2. GPS Antenna 1 unit
- 3. 2.4 GHz Antenna 2 units
- 4. 4G LTE Antennas 2 units
- 5. LAN cable (80 cms) 1 unit
- 6. Power adapter
- 7. Different power plug adapters for various countries

* Components inside the box are subject to change



Items not included with the wireless gateway:

1. SIM card

The gateway is tested from FAFNIR with the Thingsmobile SIM card.

It is recommended to use 4G internet connectivity for uninterrupted data transfer to the SECON-Server.

- 2. SIM-Eject Pin For removing the SIM tray
- 3. SIM card adapter For proper fit of the SIM card on the SIM tray. The integrated SIM card adapter is designed for mini SIM cards. If a micro or nano SIM is used, a suitable card adapter must be selected.
- 4. LAN cable To connect the gateway and VISY-Command WEB



3 Hardware installation

The following steps are required for proper hardware installation of the product.

1. Remove SIM tray using the SIM eject pin and place the SIM card on the SIM tray properly.



The SIM card must be installed without power supply of the Wireless Gateway!

Replace the SIM tray in the SIM tray slot.



2. Mount the correct power plug adapter based on the available power socket, i. g. the power plug adapter for Germany, see the figure below:





- 3. Connect the following cables in their respective cable entries:
 - Power cable
 - 2.4 GHz Antenna 2 units
 - 4G LTE Antennas 2 units
 - GPS Antenna 1 unit (if needed)



4. Connect the power adapter to the power supply. In a couple of minutes, the LED's of Power and Wi-Fi are turned ON.



For more information please refer to:

https://static.gl-inet.com/www/images/products/gl-x300b/x300b_user-manual_20220527.pdf



4 Configuration

Initial configuration of the gateway is necessary before usage. To configure the gateway please follow the below steps:

4.1 Admin Panel

- 1. Connect the gateway to your Laptop using any of the following methods:
- Use the provided LAN cable to connect the gateway with the laptop (or)
- Search for a Wi-Fi signal named "GL-X300B-..." and establish a connection with this signal. When prompted for a password, please enter "goodlife" (All characters in lower case). The gateway name and password can be found on the backside of the gateway.



2. After the connection is established, enter the IP address <u>http://192.168.8.1</u> of the gateway in your browser. It is recommended to use Google Chrome or Firefox. You will then be redirected to the Admin panel of the gateway.





3. The language setting webpage will be displayed where you need to select the desired language. Select your preferred language and click "Next"

GL·ÎNet	
	Choose Your Language GLX3008
[English v

4. The password setting page will be displayed next. There is no default password for the admin panel. Set your desired password and then click "Submit".

Note: This password only applies for the admin panel and it does not change the Wi-Fi password. The Wi-Fi password can be changed inside the admin panel.

Set Up Yo	our Admin Password
New Password	5-32 characters
Confirm Password	Must be identical to above Your admin password will be used for configuring everything on the Admin Panel of your router. It is EXTREMELY important to keep it safe.
	Back Submit



5. After the initial setup, you will then enter the web Admin panel of the gateway. By default, you will be in the "Internet" section (see left side of the admin panel). This section provides information on the active status of the gateway, LAN Clients, WLAN clients, 3G/4G modem (SIM-card) and the possibility to set up the SIM card and LAN connection.

GL·iNet ADMIN PANEL			Reboot Logout English ~
 INTERNET WIRELESS CLIENTS UPGRADE FIREWALL 	Cable 🔸 Repeater 奈 Tethering 📮 3G/4G Modern 🙀	GL-X300B-041 GL-X300B-041	WLAN Clients LAN Clients
🛡 VPN 🗸			
APPLICATIONS -	• JT		
MORE SETTINGS -	SIM card cannot be registered. Please check: 1. Y Modem Name IMEI Abort AT Command Modem Reset Cells Info SM:	You are using the compatible modern for your carrier; 2. Whether Manual Setup S Forward	a specific APN or data plan is required.
	Cable No cable detected in WAN. Please plug in an Internet cable.	Repeater Repeater (STA) is disabled/not configured. Set up now. Scan	• Tethering
	Using as WAN, change	Saved Networks Repeater Options ¢	



4.2 Internet section

1. For SIM cards without any security PIN, the connection to internet should be established automatically in a couple of minutes. The screen will look like the below indicating "4G" when Internet is available.

GL·ÎNet ADMIN PANEL	Reboot	Logout English ~
😚 INTERNET		
WIRELESS	Repeater 🛜 🗍 WLAN Clients	
UPGRADE	CL_X300B-041	
본 FIREWALL	GL-X300B-041-Guest	
VPN -		
## APPLICATIONS -	• JT	₩ 4G 11
🗱 MORE SETTINGS 🗕	Modem Name EG25GGBR07A08M2G	
	IMEI IP Address	
	Upload 37KB	
	Download 44KB	
	Disconnect Manual Setup	
	AT Command Modem Reset Cells Info SMS Forward	

- 2. If there is no internet connection, click the "Auto Setup" option. The SIM card should then be setup automatically and internet should be available.
- 3. For SIM cards with security PIN, the setup needs to be done manually. Click "Manual Setup" and then click "More" in the next screen and follow the below steps:

• 3G/4G Modem		
O SIM card need PIN number		
Modem Name	EG25GGBR07A08M2G	
IMEI		
	Abort Manual Setup	
AT Command Modem Reset	Cells Info SMS Forward	



• 3G/4G Modem	
SIM card need PIN number	
Operator	Auto ~
Device	/dev/ttyUSB3 ~
Service	LTE/UMTS/GPRS ~
APN	~
More	
Cancel Apply	
AT Command Modem Reset Cells Info SMS Forward	

- Under the option "Device", select "/dev/cdc-wdm0" or "/dev/ttyUSB3"
- Under the option "APN", type the APN from your SIM card provider. Search for the APN via internet or contact your mobile service provider for assistance.

For example, if you are using a Vodafone SIM card in Germany, the APN is "web.voda-fone.de"

• Under the options "Dial number/Pin code" and "Password", enter your SIM-card's security PIN in both the fields

Note: When "/dev/cdc-wdm0" is chosen in device option, enter the security PIN in "Dial number" and "Password" section

When "/dev/ttyUSB3" is chosen in device option, enter the security PIN in "Pin code" and "Password" section

• Finally click "Apply". The SIM-card is now setup, and internet will be available in a couple of minutes



• 3G/4G Modem	
SIM card need PIN number	
Operator	Auto ~
Device	/dev/ttyUSB3 ~
Service	LTE/UMTS/GPRS ~
APN	~
Auth	NONE
TTL	
MTU	
Pincode	
Dial number	
User Name	
Cancel Apply	
AT Command Modem Reset Cells Info SMS Forward	



• Once a connection to the internet is established your admin panel screen will look like the below.

Andrea Maria	ECIECOPRIZARINO	
lodem Name	EG25GGBRUTA08M2G	
MEI		
PAddress		
lpload	12KB	
ownload	11KB	
Diago	Manual Setun	

4. The wireless gateway has only one WAN port and one LAN port. It is recommended to use the converter function of the gateway to change the WAN port into a LAN port. This additional LAN port can be used to connect the VISY-Command WEB and to have a second LAN port available for the configuration of the gateway.

To convert the WAN port to a LAN port, click the option "change" in the subsection "Cable" at the bottom of the "Internet Section" page, and a dialog box will appear. Click "Yes" in the dialog box to convert the WAN port to a LAN port.

Cable		Cable
No cable detected in WAN. Please plug in an Internet cable.	-	WAN port has been used as LAN. You can set it back to WAN below.
Using as WAN, change		Using as LAN, change

Now the WAN port is converted to a LAN port.



Additional settings are available in the admin panel such as:

- WIRELESS To configure the Wi-Fi settings of the gateway
- CLIENTS To monitor all the clients connected (both wired and wireless) to the gateway
- UPGRADE To upgrade the gateway to the latest firmware
- FIREWALL To set up port forwarding, opening ports on gateway etc.
- VPN To set up various options using VPN
- MORE SETTINGS To change admin password, reset the gateway etc.

GL·iNet ADMIN PANEL	
S INTERNET	
🗢 WIRELESS	Cable <>
	Repeater 🛜
UPGRADE	Tethering
본 FIREWALL	Vodafone.de 🧟
🛡 VPN 🗸	
APPLICATIONS -	Vodafone.de
🗱 MORE SETTINGS 🗸	Modem Name
	IMEI

To learn how to use these options please visit:

https://static.gl-inet.com/www/images/products/gl-x300b/x300b_user-manual_20220527.pdf



4.3 Connecting VISY-Command Web to the wireless gateway

1. Use another LAN cable (if the provided LAN cable is being used for configuration) to connect the WAN port (settings changed to LAN) of the gateway to the LAN port of the VISY-Command WEB.



2 In the VISY-Command WEB, go to "Configuration \rightarrow Settings \rightarrow VPN".

A login screen appears. Enter the username "admin" and the password "vap22765" and click "Save".

The VPN configuration page will now be available.



15:32:32 🔬 📕
Configuration > Settings > VPN
Login
user: admin
password:
Reset Save
1 2 3 4 5 6 7 8 9 0
a b c d e f g h i j k i m + +
n o p q r s t u v w x y z - Clear

3 The network data for the VPN connection should be entered here. This configuration establishes a secure VPN tunnel for remote connection to the SECON-Server.

For this network data, please contact your IT network administrator. Once you have entered the data, click "Save" and the VPN should have been established. The lock symbol on the top of the display indicates an established VPN connection.

LEVEL	15:27:		
	Configuration > S	ettings > VPN	
		eccings > vrn	
	VPN-Server IP Address:	1194	
	Protocol:	UDP	
	Reset www	Save	
VPN	-Certificate currently in use: >	Version 2 »valid until 2031-08«	
		I	



4 Restart the VISY-Command WEB (or) unplug the display wire and reconnect it. Once the display is completely rebooted, go to the menu item "Configuration → Tools → Ping" to test the proper functioning of the internet connection.

Enter a sample IP address "8.8.8.8" of google and click "Start". You should get a similar screen (see below) with data transmitted and received which indicates a working internet connection.



FAFNIR		15:33:33		
VAPORIX	LEVEL Environmen	nfiguration > Tools	nfiguration Ring	
		IP Address: 8.8.	8.8	
	R	eset	Starty	
PING 8.8.8.8 (8.8 64 bytes from 8.1 64 bytes from 8.1 64 bytes from 8.1 8.8.8.8 ping st 3 packets transm round-trip min/av	8.8): 55 data bytes .8.8: seq=0 tti=111 time=38 .8.8: seq=1 tti=111 time=28 .8.8: seq=2 tti=111 time=28 atistics tted, 3 packets received, 0% g/max = 28.426/31.774/38.1	.154 ms .743 ms .426 ms packet loss 54 ms		



5 Check the SECON-Server for the availability of the data from the VISY-Command WEB

AFNIR Welcome to SECON-Server							
View ATG	Environmental	VAPOR C	configuration	Informatio	on)		
		ATG	≻ Data				
Select Options	Station:						
	Start / End Time: 00:00 🗸	Start Date: me 202	22-10-01 End D	oate: 🔜 2022-10-	26 Tank:	1 'Aviation-Fuel'	
► Tanks							
1 47.9 % 2 42.4 %	382.6%						
	Tank	Measurement value	95	Configura	tion		
	1	Volume TC 464.9	L	Nominal vol.	1000.0 L		
		Mass 324.6	kg	Safety vol.	30.0 L		
		Level 344.9	mm	Product	Aviation-Fuel	2022-10-25 15:38:45	
		Ullage 505.1	L .	Product quality ID	5	Snapshot	
Aviat	ion-Fuel	Water level 0.0 mm	n/001	comp. remperature	15.0 °C		
10	401	Density g/L				Download	
40	4.3 L	Density TC g/L					
32	1.6 kg	Sump density g/L					
52.	Ng	Density Temp 9C					

- 6 Wireless gateway is now installed and internet connection from the VISY-Command WEB to the SECON-Server is now established
- 7 Additionally, using the wireless gateway, remote configuration of the VISY-Command WEB can also be performed by following the below steps:
 - a. Connect the Laptop to the wireless gateway's network via Wi-Fi or use a LAN cable between Laptop and wireless gateway
 - b. Enter the IP address of the VISY-Command Web in the browser and press enter. You will be prompted with login credentials which can be found in the following Technical Documentation:
 - SECON-Client Administrator, chapter "Remote Connection to the SECON-Client, art. No. 350340
 - c. After logging into the Admin mode, the configuration of the VISY-Command Web can be performed remotely

To learn more about the remote configuration, please visit the download section of our website <u>www.fafnir.com</u>



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