GX GSM



1. Introduction

The GX GSM is an accessory for Venus-devices. It is a cellular modem; providing a mobile internet for the system and connection to Victron Remote Management (VRM).

It requires a full sized SIM card; and connects to the Venus-device with a (supplied) 1m USB cable.

A small indoor GSM antenna is included. As an option we also sell an outdoor GSM antenna (Part Number: GSM900200100)

See also the GX GSM Product Page.

GPS

Besides internet, the GX GSM also has a GPS receiver. To use that, buy the optional active GSM antenna. (Part Number GSM900100100)

<	GPS	♀ 3G R _{.11} 12:51
Status		GPS OK (fix)
Latitude		53° 13' 11.3" N
Longitude		6° 36' 25.4" E
Speed		2.0km/h
Course		145.5°
Altitude		-38.6m
Number of satellites		9
Format	52° 20' 41	6" N, 5° 13' 12.3" E
Speed Unit		Kilometres per hour
Device		>
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Compatibility

- Color Control GX
- Venus GX
- Octo GX

The GX GSM requires Venus OS v2.20 or newer to be installed on the Venus-device.

When to use a mobile router instead

The GX GSM only provides an internet connection for the Venus-device: there is no option to share the internet to laptops, phones, or other devices.

For installations where more devices need internet, such as a yacht or RV, consider installing a mobile router instead. More information here.

2. Installation

Mount the device and connect the antenna. Consider using the outdoor antenna when installing the GX GSM in a closed metal enclosure.

Insert the SIM card. You will need to eject the SIM card tray with a pen or other pointy object. Be aware that the SIM card try sits slightly recessed inside the unit. Be sure to push it all the way in.

Connect the GX GSM to the Venus device with the supplied USB cable. Use a USB hub if all USB

sockets are already in use.

Connect DC power supply (8 to 70 VDC). A 1.4M wire is included, with M10 lugs and an inline fuse.

3/6

After power-up, the blue LED will be solid blue. Next, once it has registered on a network, it will start blinking slowly. Finally, when it has established the internet connection, it will be blinking fast.

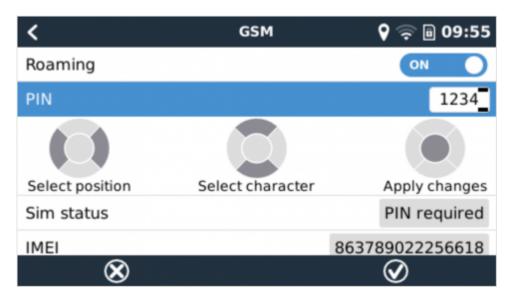
3. Configuration

<	GSM	. _{II} 11:41
Internet		Online
Carrier		vodafone NL 3G
Signal strength		at
Allow roaming		
Sim status		Ready
IP address		10.164.191.132
APN		Default >
IMEI		863789022273241
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When using a SIM card with its SIM-pin security disabled, the system will work without further configuration. Verify operation by .. ? (Check VRM Last log data?)

Setting a SIM pin helps reducing the risk of the SIM card being stolen and used. Use a mobile phone to set the SIM pin, and there after configure it on the Venus device.

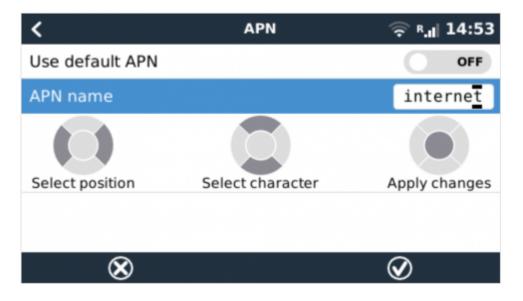
Settings \rightarrow GSM modem \rightarrow PIN code



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Some mobile networks require manual configuration of an APN specially when roaming. Contact your operator.

APN name can be configured in Settings \rightarrow GSM Modem \rightarrow APN.



4. Status

GSM modem status can be checked at a glance by looking at the status bar.

lcon	Details
at	GSM modem is connected to network, but not to the internet (no data connection). Either on purpose, because an ethernet or WiFi connection is available.
^{3G} .II	GSM modem is properly configured, the 3G/E/etc icon reflects that the GSM modem internet connection is in use.
.	WiFi is available and its internet connection is in use. WiFi has priority over GSM.
8	SIM PIN code is required.
^R .1	Roaming, only informative. To use internet connection while roaming it needs to be enabled in Settings \rightarrow GSM modem \rightarrow Allow roaming.

5. Trouble shooting

	Step	Details
1	Power	Check that the blue LED is either lit continuous or blinking
2	USB	The modem must be connected to USB, and visible in the Settings \rightarrow GSM modem menu
3	Simcard	If enabled, PIN code must be configured in Settings \rightarrow GSM modem \rightarrow PIN
4	Signal strength	1 bar for VRM logging, 2/3 bars for remote console
5		Check that a network name is visible. If it is not, contact your simcard provider and/or insert the simcard in a phone to double check its operation.

You also need to remember that an outdoor antenna typically increases received signal by 15 dB to 25 dB. (verify)

6. Technical Data

Outer dimensions (LxWxH)	106×42.5×22 mm (Drawing)
Voltage range	870 VDC
Power draw	2.5 W while 2G/3G data transfer <1.0 W in idle mode +0.4 W if GPS is enabled
Recommended fuse size	500 mA @ 12 V 250 mA @ 24 V 100 mA @ 48 V
Wire gauge (power cable)	0.51.5mm² / AWG 2816
Antenna connector	Type SMA Female
SIM card	Regular Mini SIM

7. Accessory / Antennas

Outdoor 2G and 3G GSM Antenna (GSM900100100)



Mounting option	Screw Mount
Cable Type	Rg-316
Cable Length	0.25 m
Connector	SMA Male Straight
Frequencies	800/900/1800/1900/2100 MHz
Signal Gain	3 dbi

Active GPS Antenna (GSM900200100)



Mounting option	Magnet
Cable Type	Rg-174
Cable Length	3.0 m
Connector	SMA Male Straight
Frequency	1575.42 MHz
Impedance	50 Ω

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