ENGLISH



GX LTE 4G manual

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This manual is also available in HTML5.

1. Introduction

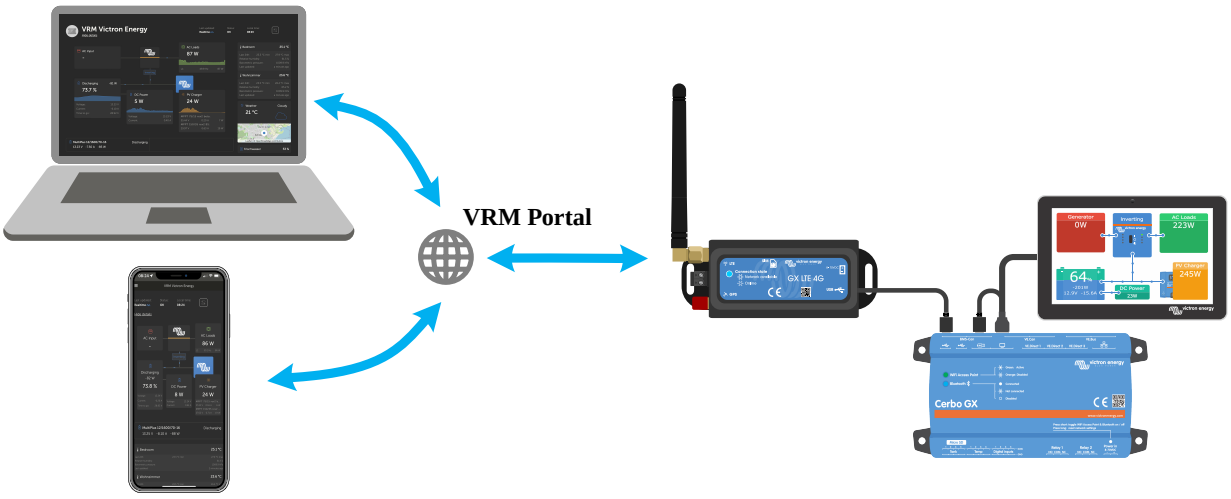
1.1. General description

The GX LTE 4G is an accessory for GX devices. It is a cellular modem that supports 2G, 3G and 4G technologies. It provides mobile internet for the system and a connection to the Victron Remote Management (VRM) portal. See also the GX LTE product page on our website.

There are multiple models, refer to the table below to see which model best matches the available cellular network bands in your region.

Part number	Name	Region	Used module	Supported LTE bands
GSM100100400	GX LTE 4G-E	For EMEA (Europe, Middle-East, Africa), Korea, Thailand	SIMCom SIM7600E	1, 3, 5, 7, 8, 20, 38, 40, 41
GSM100200400	GX LTE 4G-A	For North America	SIMCom SIM7600A	2, 4, 12
GSM100300400	GX LTE 4G-SA	For Australia, New Zealand, South America	SIMCom SIM7600SA	1, 2, 3, 4, 5, 7, 8, 20, 28, 40, 66

For more details, please refer to the SIM7600X Comparison Table.



2. Features

2.1. Built-in GPS receiver

The GX LTE 4G includes a built-in GPS receiver. When the optional active GPS antenna is installed, the system can be tracked as well as geo-fenced on the VRM Portal.

The required accessory part number is GSM900200100 - Active GPS Antenna for GX GSM.

2.2. GX compatibility

The GX LTE 4G can be used with any of the GX devices and requires Venus OS v2.60 or newer to be installed on the GX device.

2.3. SIM card

It requires a SIM card of the Mini-SIM format.

2.4. When to use a mobile router instead



The GX LTE 4G provides only an internet connection for the GX device. Sharing the internet with laptops, phones, or other devices is not possible.

For installations where more devices require internet, as is often the case on a yacht or RV, or where a reliable failover/backup solution is needed, consider installing a mobile router with this functionality instead.

A mobile router can share cellular data with multiple devices such as smartphones, tablets, laptops and other devices via its Ethernet port or WiFi and is able to switch to a previously configured WiFi connection in the event of an Ethernet connection failure or vice versa.

2.5. Antennas and accessories

A small indoor LTE antenna is included. Optionally, we also sell an outdoor LTE antenna, which increases the range:

- Part number GSM900100400 - Outdoor 4G GSM Antenna

2.6. What's in the box?

- GX LTE 4G (with integrated USB cable)
- GSM 2G/3G/4G mini rod antenna (for indoor use)
- DC power cable (with inline fuse and terminal block)

3. Installation and configuration

3.1. Installation step-by-step

Follow the steps below to install the GX LTE 4G:

1. Mount the device in a place that is not covered by metal objects. Consider using the optional outdoor antenna when installing the GX LTE 4G in a closed metal enclosure, car, or van to increase the range.

2. Mount the included antenna to the SMA connector labeled LTE.

3. An optional active GPS antenna is screwed onto the SMA connector labeled GPS.

4. 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 tray sits slightly recessed inside the unit. Be sure to push it all the way in.

5. Connect the GX LTE 4G to the GX device with the supplied USB cable. Use a USB hub if all USB sockets are already in use.

6. Connect the DC power supply (8 to 70 VDC). A 1.4 m cable with M10 cable lugs and a built-in Slow Blow fuse 3.15A 250V, 5x20mm is included. Pay attention to the correct polarity as labeled on the front sticker.

7. After power-up, the blue LED will be solid blue. Once it has registered on a network, the LED will start blinking slowly. Finally, when the internet connection is established, the LED will blink quickly.



The ground of the GX LTE 4G power supply must match that of the GX device.vic This is usually battery minus if the devices are supplied via the battery.

6. Technical data

6.1. Technical data

GX LTE 4G	GSM100100400 | GSM100200400 | GSM100300400
Supply voltage range	8 - 70VDC
Power draw	2.5W while 2G/3G/4G data transfer <1.0W in idle mode +0.4W if GPS is enabled
Operating temperature range	-40 +50°C (-40 - 120°F)
Power cable (included)	1.4m cable with inline fuse holder, terminal block and 10mm ring terminals
Inline fuse (included)	T3.15A250V
COMMUNICATION	
USB communication port	Fixed 1.0m cable with USB-A connector (connects to the GX device)
LTE antenna connector	Type SMA Female (optional 4G outdoor antenna GSM900100400)
GPS antenna connector	Type SMA Female (optional GPS antenna GSM900200100)
GNSS	GPS/Beidou/GLONASS/GALILEO/QZSS
SIM card	Regular Mini SIM (supports both 1.8V and 3V)
Data transmission (max. Download/Upload)	LTE Cat-1: 10 Mbps / 5 Mbps 3G (HSPA+): 42 Mbps / 5.76 Mbps 2G (EDGE): 236.8 Kbps / 236.8 Kbps 2G (GPRS): 85.6 Kbps / 85.6 Kbps
Status indicator	Blue LED
INSTALLATION & DIMENSIONS	
Dimensions (l x w x h)	106 × 42.5 × 22mm
Weight	0.08kg (0.177lbs)
Wire gauge (power cable)	0.5..1.5mm2 / AWG 28..16 or use supplied power cable
Recommended fuse size	500mA @ 12V / 250mA @ 24V / 100mA @ 48V or use supplied inline fuse
STANDARDS	
Safety	EN 60335-1 / EN 60335-2-29 / EN 62368-1
Emission / Immunity	ECE R10-5
QM	EN 9001:2015