

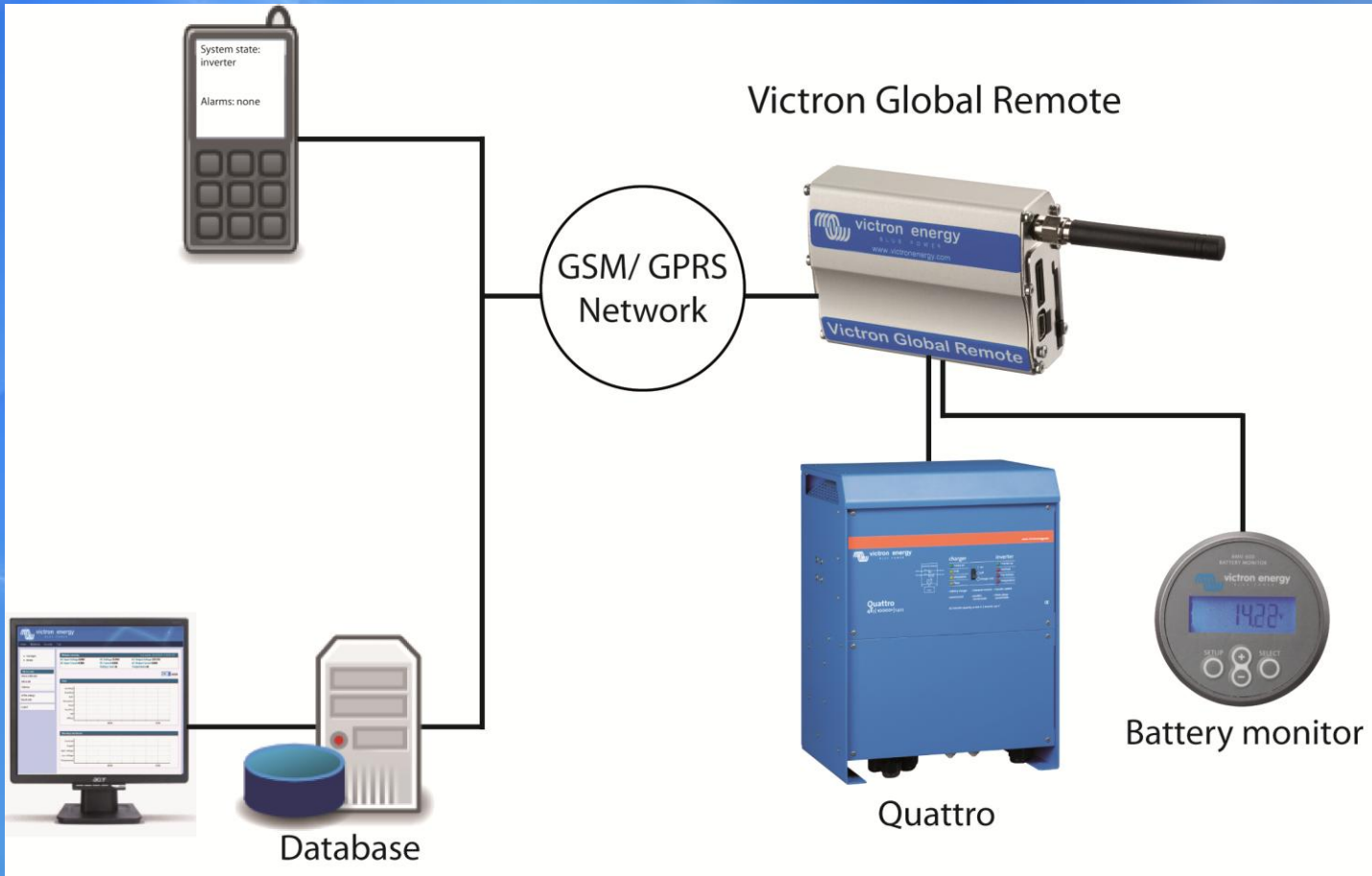
Victron Global Remote

Victron Ethernet Remote

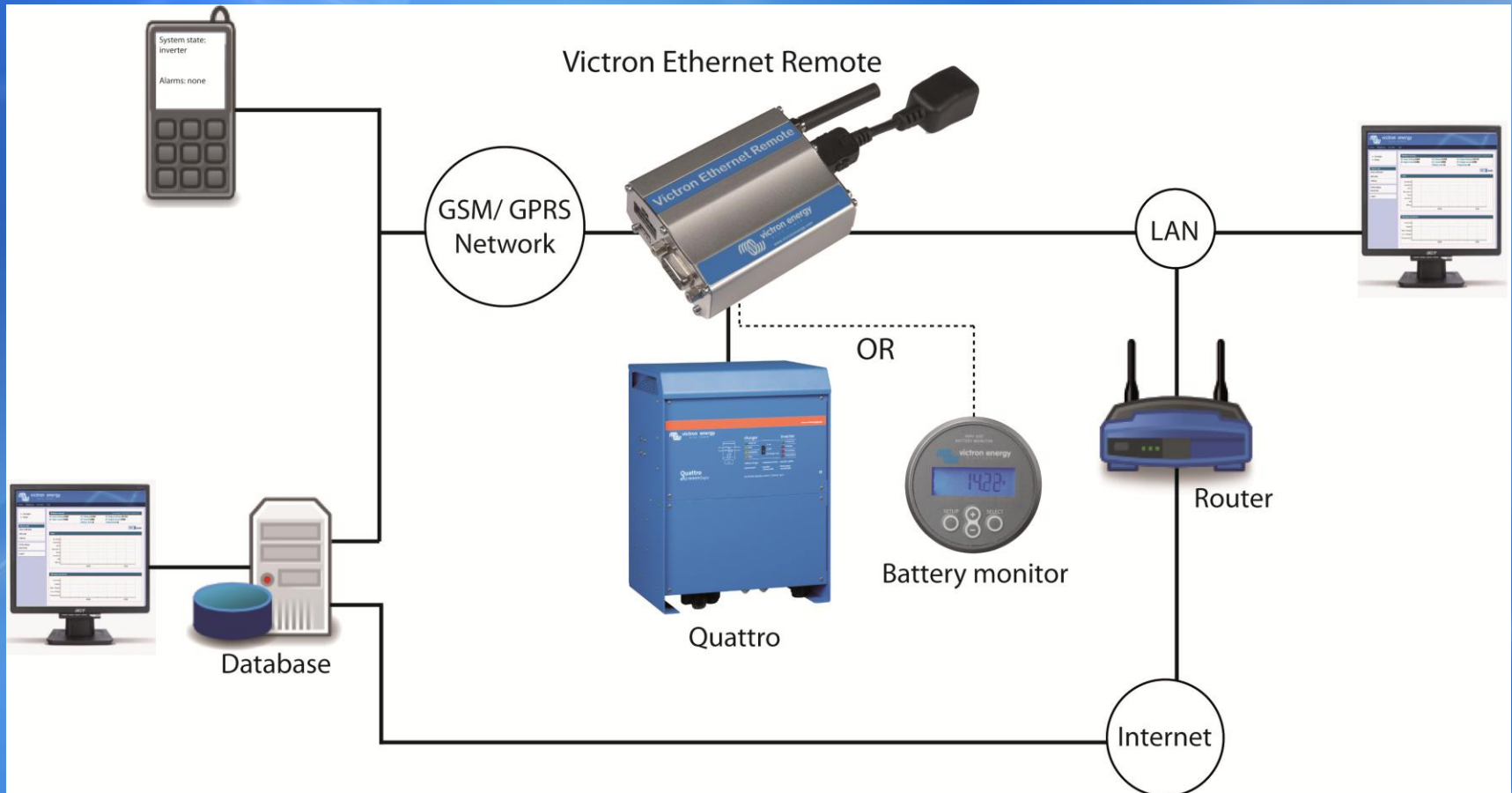
Contents

- System overview diagrams
- Detailed connection schematics
- Examples of Text messages (SMS)
- vrm.victronenergy.com: free online portal
- Configuring GPRS
- VGR Configure software
- Remote VEConfigure

Overview - Victron Global Remote



Overview - Victron Ethernet Remote



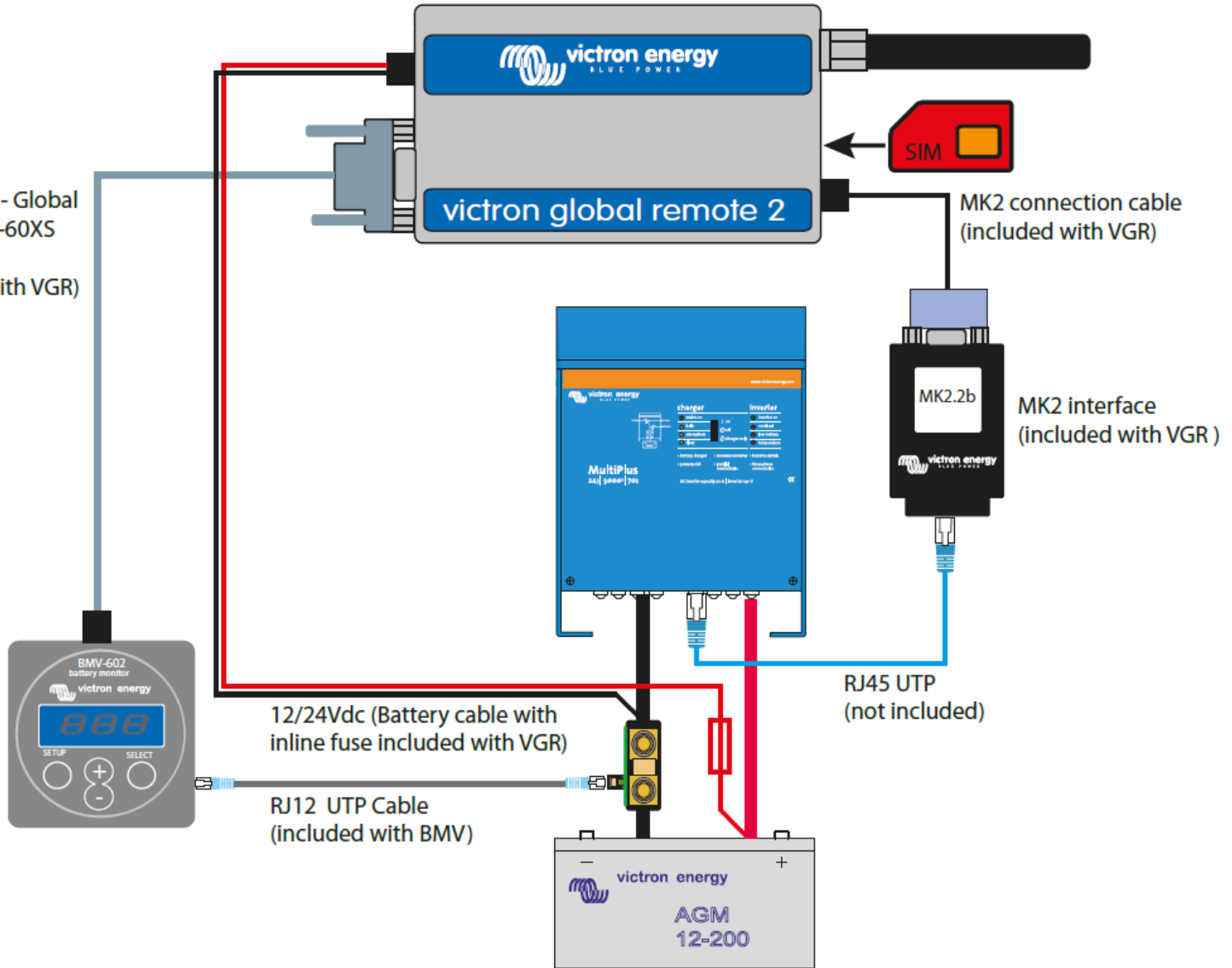
System schematics

There are four main different configurations possible:

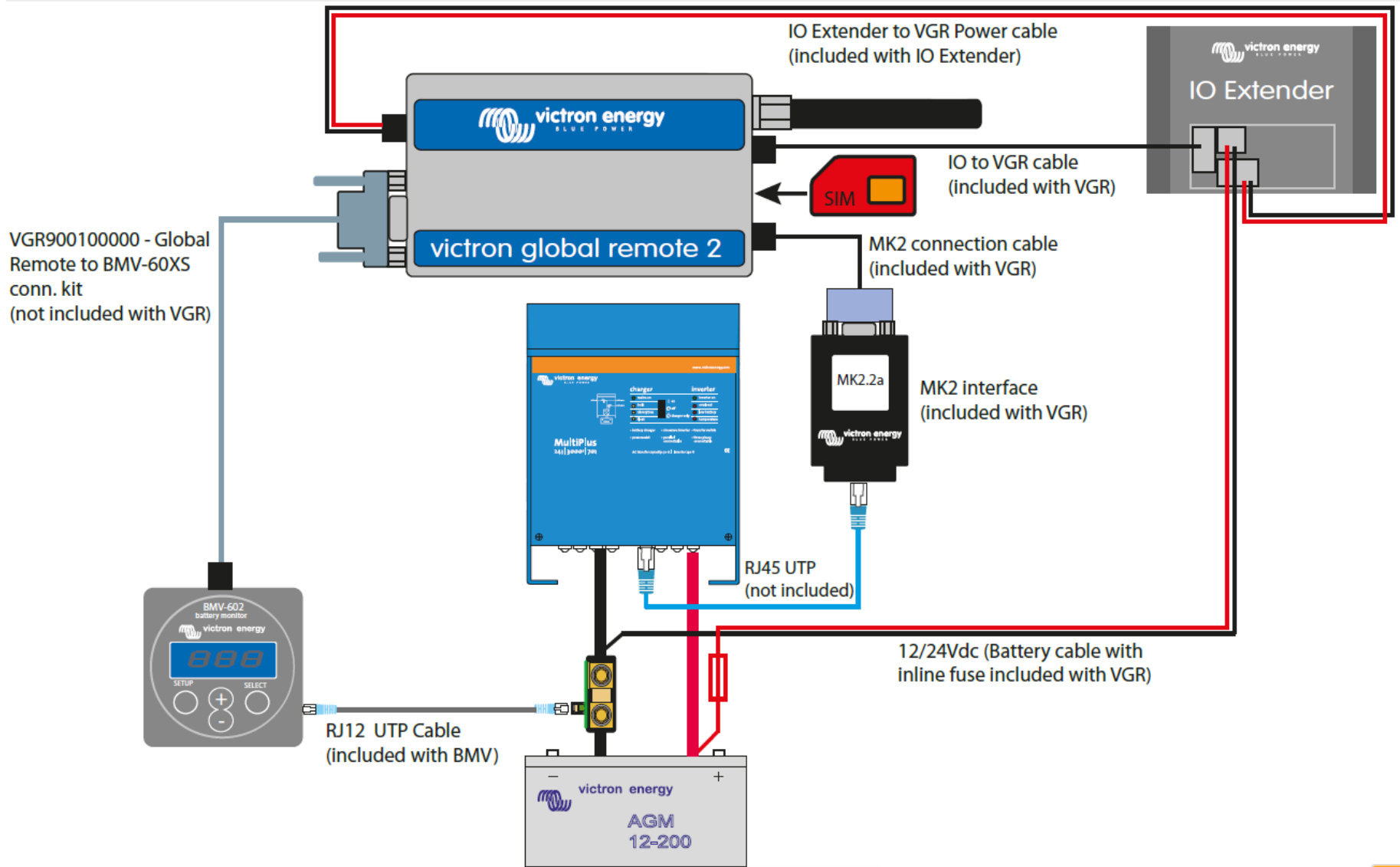
- VGR with BMV and/or VE.Bus
- VGR with BMV and/or VE.Bus and IO Extender
- VER with BMV
- VER with VE.Bus

VGR with BMV and/or VE.Bus

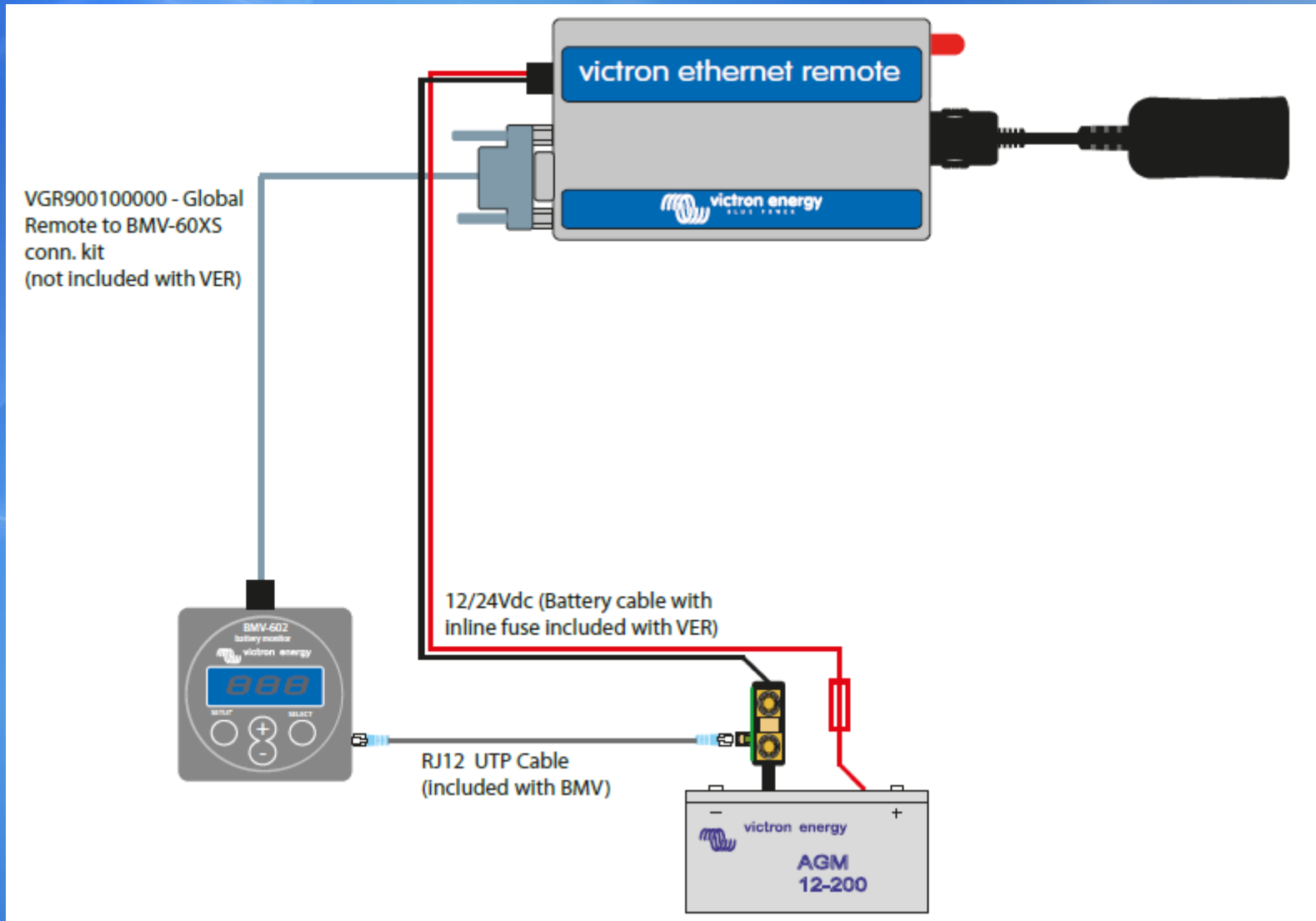
VGR900100000 - Global Remote to BMV-60XS conn. kit (not included with VGR)



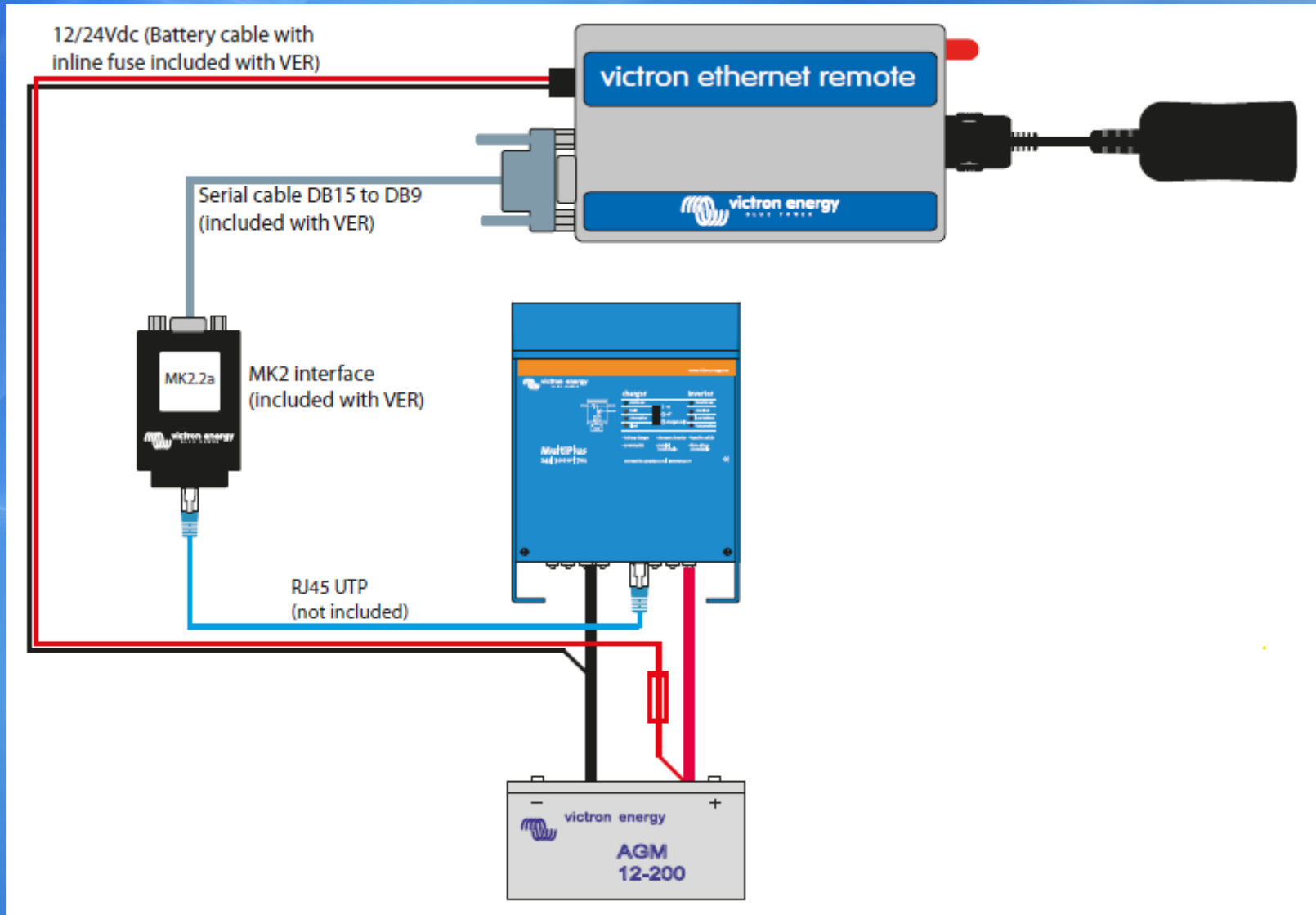
VGR with BMV and/or VE.Bus and IO Ext.



VER with BMV



VER with VE.Bus



Text messaging

Send message to VGR:

info

Reply message:

System state: inverter
Alarms: none
Warnings: none
DC: 48.97V 16.71A in
AC in: 0.0V 0.0A 0.0Hz
AC out: 229.9V 3.8A 60Hz

Information from Multi

Battery: 26.6V, -017A
Level: 98%, -8Ah
TTG: 240h

Information from BMV

Text messaging – IO Extender

Send message to VGR:

io

Showing the IO Extender status

Reply message:

```
IO
OUT1: open
OUT2: open
IN1: open
IN2: open
IN3: closed
Temperature: 39C/102F
```

Text messaging – IO Extender

Send message to VGR:

output 1 closed

Closing one of the two contacts.
To start, for example, a generator.

Reply message:

IO
OUT1: open
OUT2: closed
IN1: open
IN2: open
IN3: closed
Temperature: 39C/102F

Text messaging – gsm network status

Send message to VGR:

gsm

60dB is full signal
113dB is no signal

Reply message:

GSM
imei: 354662030005820
sim: OK
signal: -67dB
ber: 0
network: home (Vodafone ES)
SMS from: +31646077489

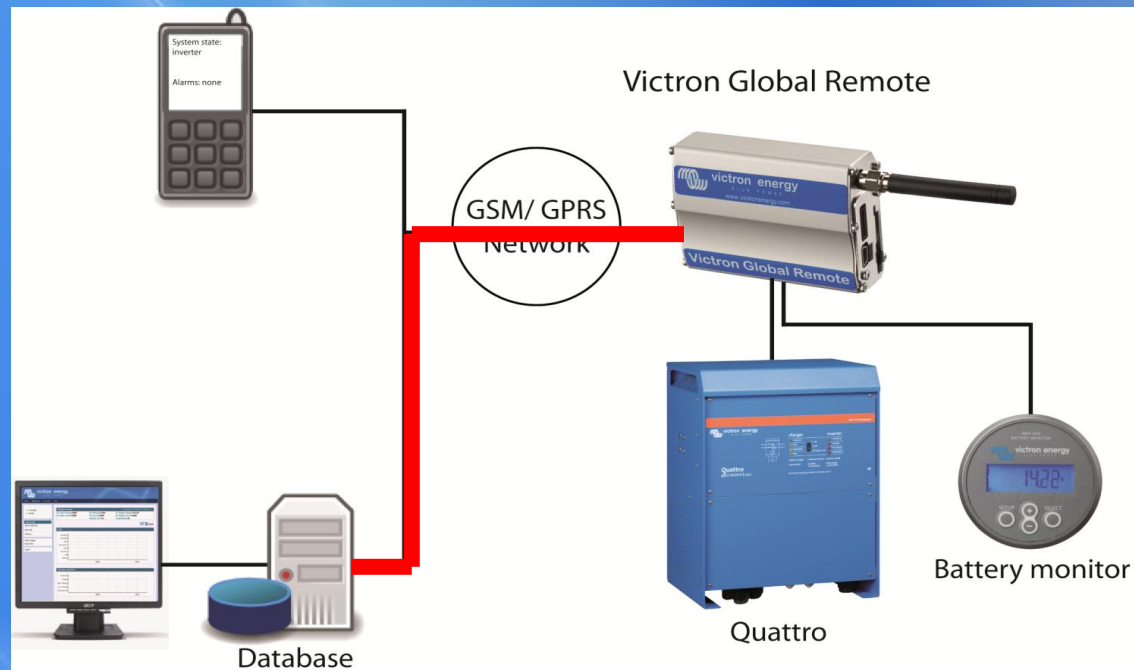


Online portal

The Victron Global Remote can log information to our online portal.

Necessary: a working internet connection:

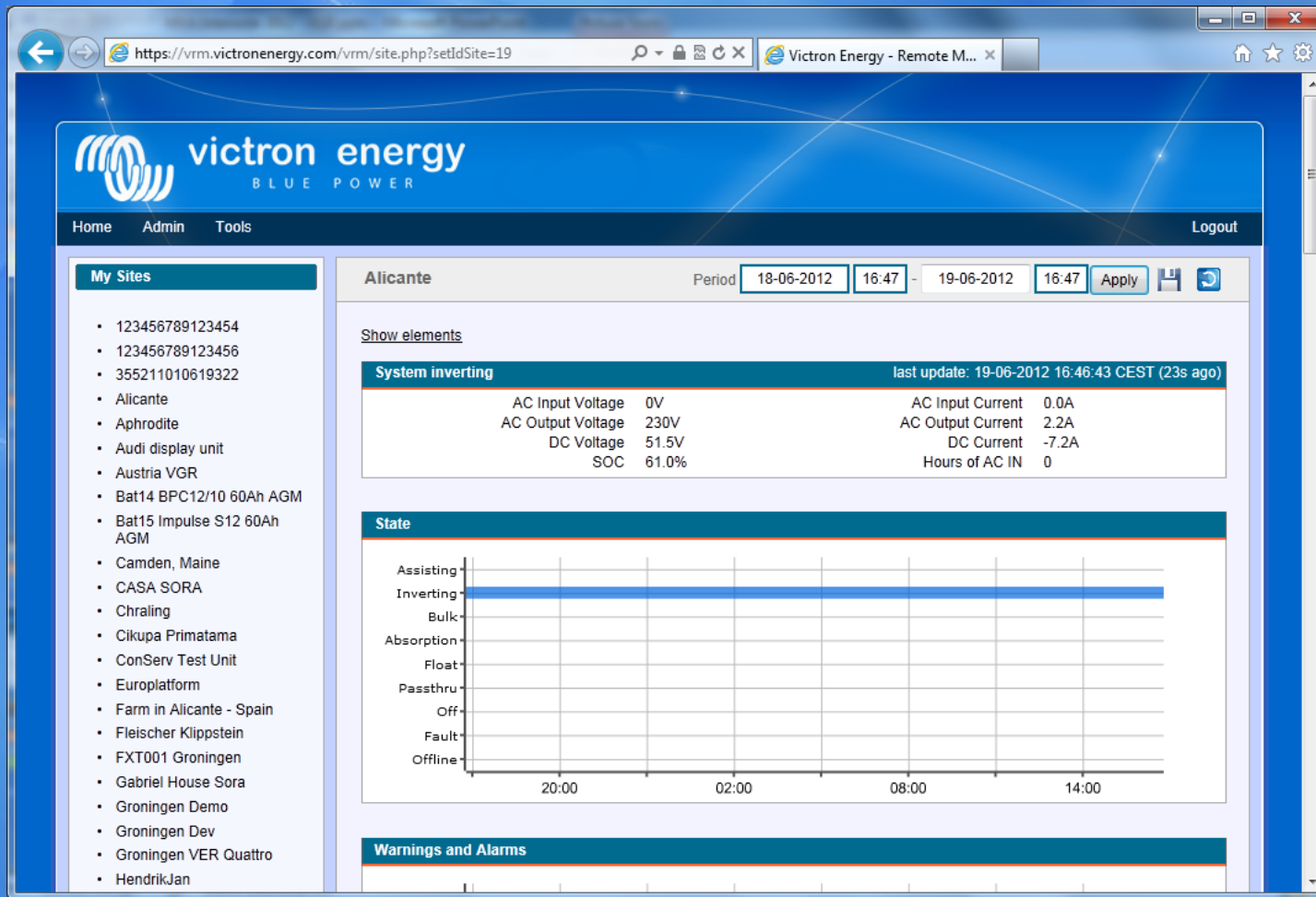
- Victron Global Remote: GPRS
- Victron Ethernet Remote: Ethernet / LAN



Online portal

<https://vrm.victronenergy.com>

Demo account: demo@victronenergy.com / vrmdemo



The screenshot shows a web browser window displaying the Victron Energy VRM portal. The browser address bar shows the URL <https://vrm.victronenergy.com/vrm/site.php?setIdSite=19>. The page header features the Victron Energy logo and navigation links for Home, Admin, Tools, and Logout.

The main content area is titled "Alicante" and includes a "Period" selector set to "18-06-2012 16:47" to "19-06-2012 16:47" with "Apply" and refresh buttons. Below this is a "Show elements" section with a "System inverting" status bar. The system is currently inverting, with a last update of "19-06-2012 16:46:43 CEST (23s ago)".

System inverting		last update: 19-06-2012 16:46:43 CEST (23s ago)	
AC Input Voltage	0V	AC Input Current	0.0A
AC Output Voltage	230V	AC Output Current	2.2A
DC Voltage	51.5V	DC Current	-7.2A
SOC	61.0%	Hours of AC IN	0

Below the system status is a "State" section with a horizontal bar chart showing the system's operational state over time. The y-axis lists states: Assisting, Inverting, Bulk, Absorption, Float, Passthru, Off, Fault, and Offline. The x-axis shows time intervals from 20:00 to 14:00. The "Inverting" state is currently active, indicated by a blue bar.

At the bottom, there is a "Warnings and Alarms" section, which is currently empty.

On the left side of the interface, there is a "My Sites" sidebar listing various monitoring sites, including "Alicante", "Aphrodite", "Audi display unit", "Austria VGR", "Bat14 BPC12/10 60Ah AGM", "Bat15 Impulse S12 60Ah AGM", "Camden, Maine", "CASA SORA", "Chraling", "Cikupa Primatama", "ConServ Test Unit", "Europlatform", "Farm in Alicante - Spain", "Fleischer Klippstein", "FXT001 Groningen", "Gabriel House Sora", "Groningen Demo", "Groningen Dev", "Groningen VER Quattro", and "HendrikJan".

Online portal: GPRS

Victron Global Remote2: A GPRS Connection is necessary to send the information to the online database.

Victron Ethernet Remote: It will send the information via the LAN. The LAN needs to have internet access.

Get the GPRS status:

gprs

Reply message:

```
GPRS
user: vodafone
pass: vodafone
apn: office.vodafone.nl
state: connected
ip: 109.32.239.49
```

Necessary to log information
to the website



Online portal: GPRS configuration

To configure GPRS, you need the following information from your telecom provider:

APN	Required
Username	Optional
Password	Optional
Proxy address and port	Optional

To find this information, you can also search Google. For example search for “GPRS Vodafone APN”. After looking around you will find the following information:

APN: live.vodafone.com
Username: vodafone
Password: vodafone

Online portal: GPRS Configuration

Configuration with APN only:

```
gprs apn live.vodafone.com on
```

Reply message:

```
GPRS  
user: username  
pass: password  
apn: live.vodafone.com  
state: connected  
ip: 109.32.239.49
```

Configuration with APN and user

```
gprs apn live.vodafone.com user  
vodafone pass vodafone on
```

Reply message:

```
GPRS  
user: vodafone  
pass: vodafone  
apn: live.vodafone.com  
state: connected  
ip: 109.32.239.49
```

Online portal: GPRS Configuration

Some providers also use a proxy. One example is KPN in the Netherlands.

Configuration with proxy:

```
gprs apn portalmmm.nl proxy  
10.10.100.20 port 5080 on
```

To remove the proxy configuration:

```
gprs proxy #
```

Reply message:

```
GPRS  
user: username  
pass: password  
apn: portalmmm.nl  
proxy: 10.10.100.20  
port: 5080  
state: connected  
ip: 109.32.239.49
```

```
GPRS  
user: username  
pass: password  
apn: portalmmm.nl  
state: connecting
```

Online portal: log interval

Send message to VGR:

log

Log interval configuration. And info when the last data was pushed to the database
(<https://vrm.victronenergy.com>)

Very useful to check of the gprs connection is OK!

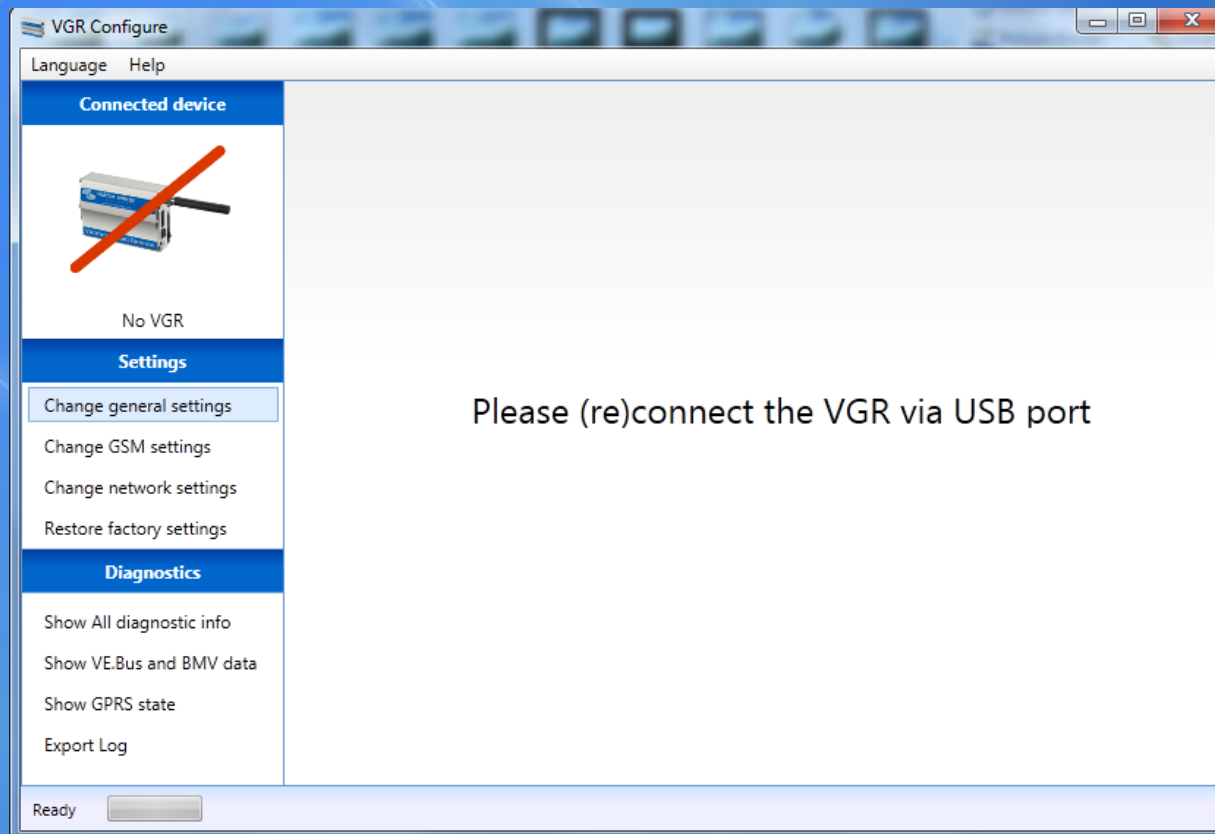
Reply message:

LOG
Period: 5min
Extra: off
Last log: 1 minutes 3 seconds ago

VGR Configure software

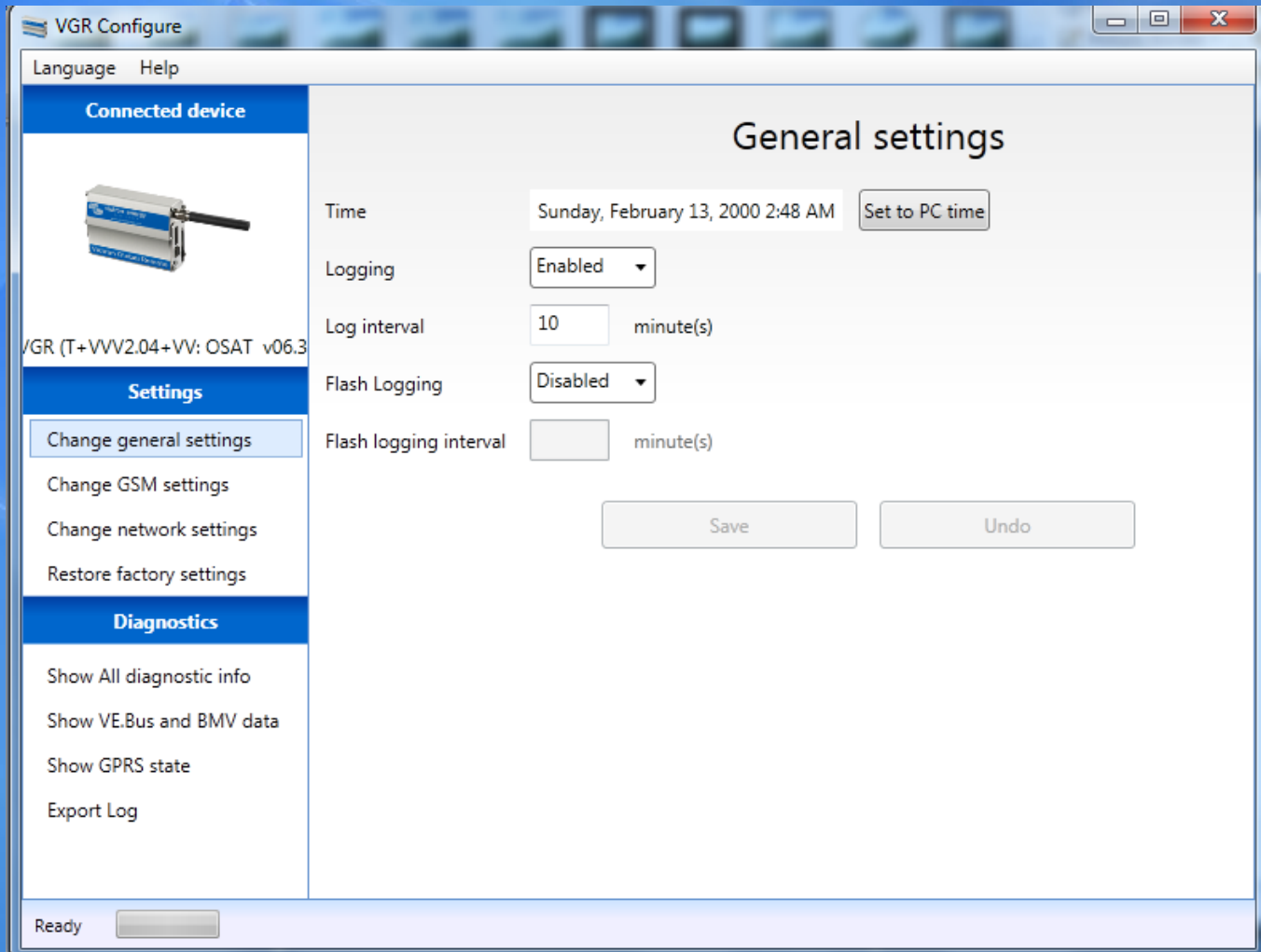
-Necessary to configure Victron Ethernet Remote, since you cannot send text messages to it, unless you put a sim-card in the Ethernet Remote.

-Available for download on our website



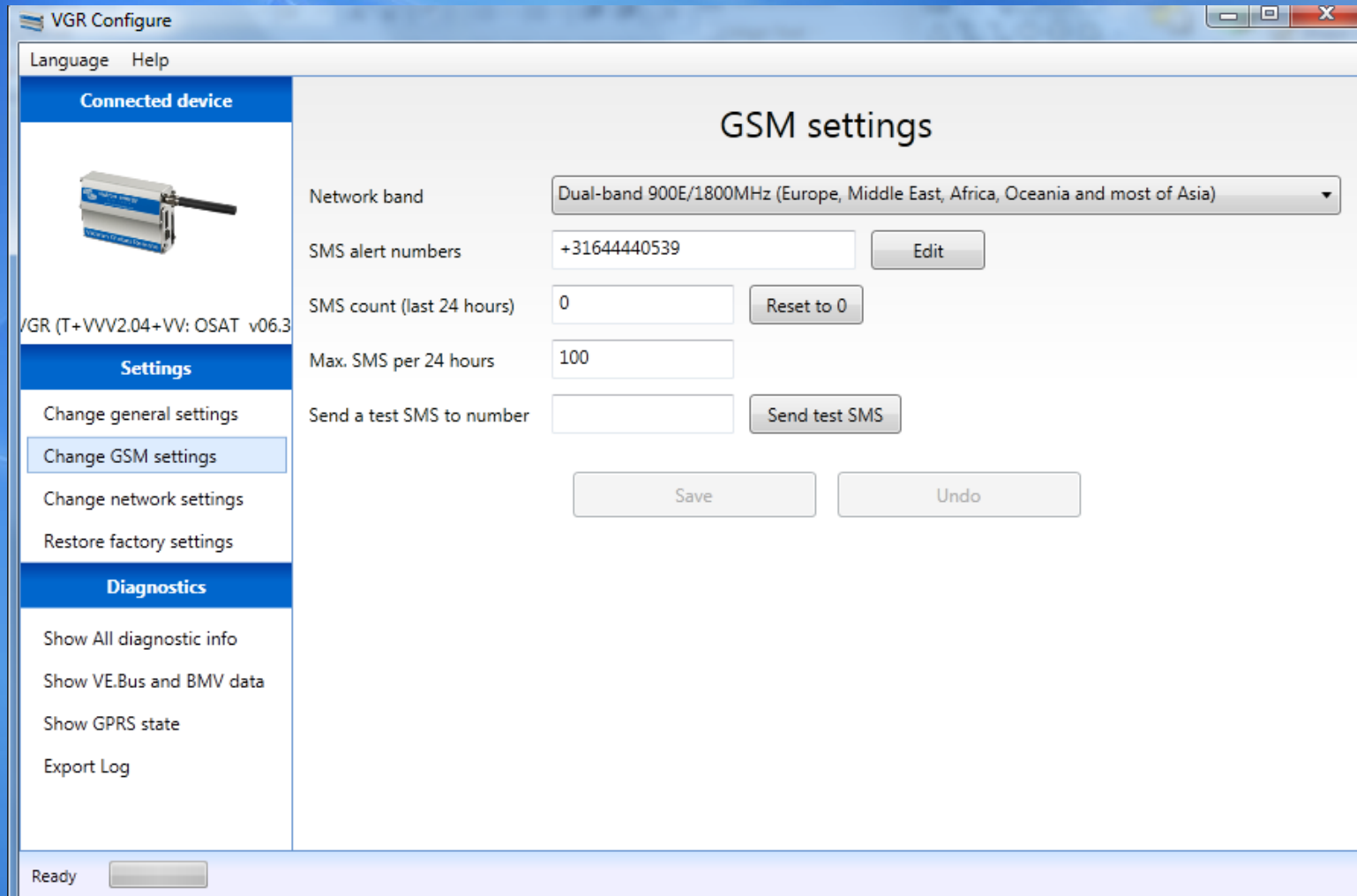
VGR Configure software

General Settings:



VGR Configure software

GSM settings:



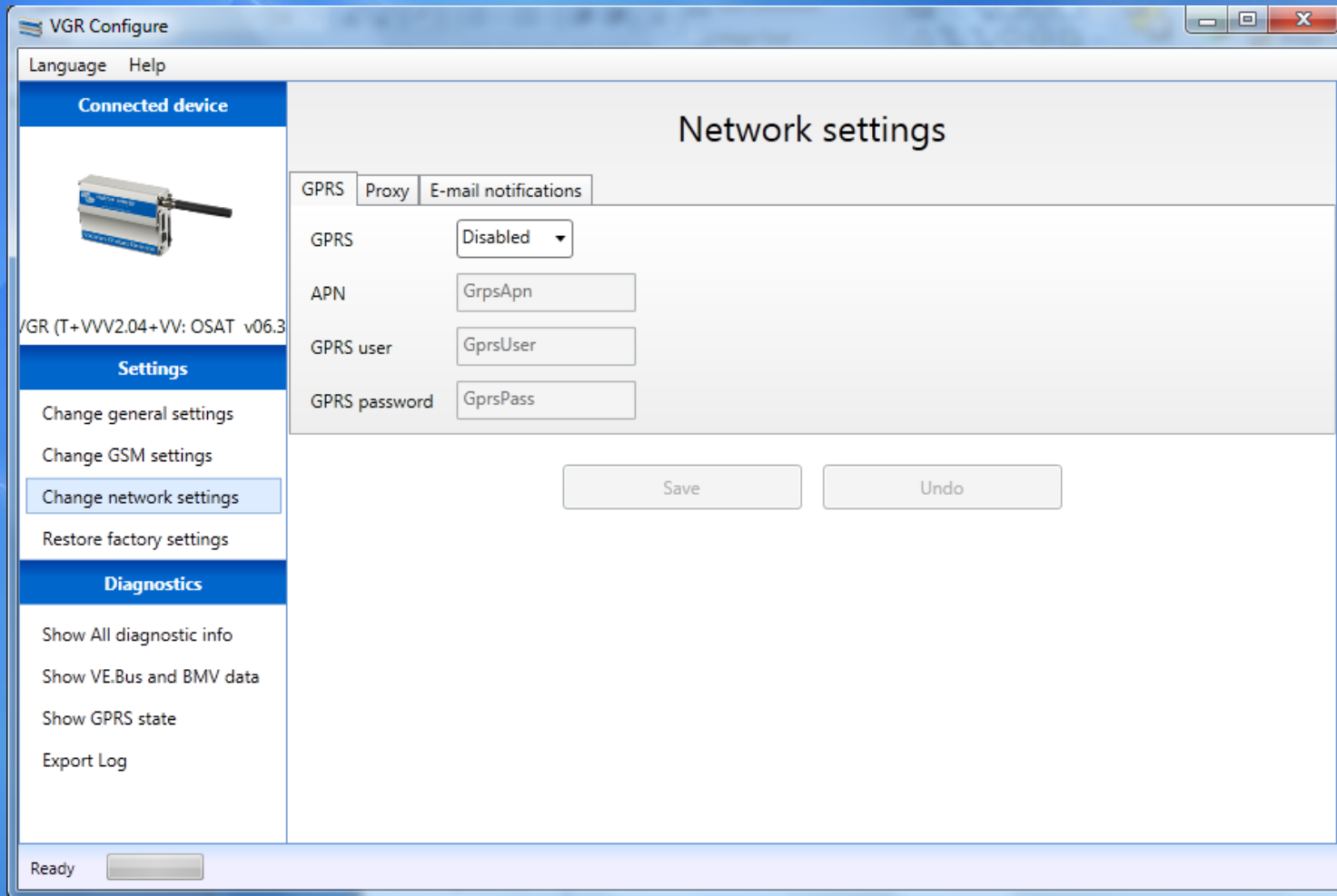
The screenshot shows the VGR Configure software window. The title bar reads "VGR Configure". The interface is divided into a left sidebar and a main content area. The sidebar has a menu with the following items: "Language Help", "Connected device" (with a device image), "Settings" (with sub-items: "Change general settings", "Change GSM settings", "Change network settings", "Restore factory settings"), "Diagnostics" (with sub-items: "Show All diagnostic info", "Show VE.Bus and BMV data", "Show GPRS state", "Export Log"), and a "Ready" status indicator at the bottom.

The main content area is titled "GSM settings" and contains the following configuration options:

- Network band:** A dropdown menu set to "Dual-band 900E/1800MHz (Europe, Middle East, Africa, Oceania and most of Asia)".
- SMS alert numbers:** A text input field containing "+31644440539" and an "Edit" button.
- SMS count (last 24 hours):** A text input field containing "0" and a "Reset to 0" button.
- Max. SMS per 24 hours:** A text input field containing "100".
- Send a test SMS to number:** A text input field and a "Send test SMS" button.
- Save and Undo:** Two buttons at the bottom of the settings area.

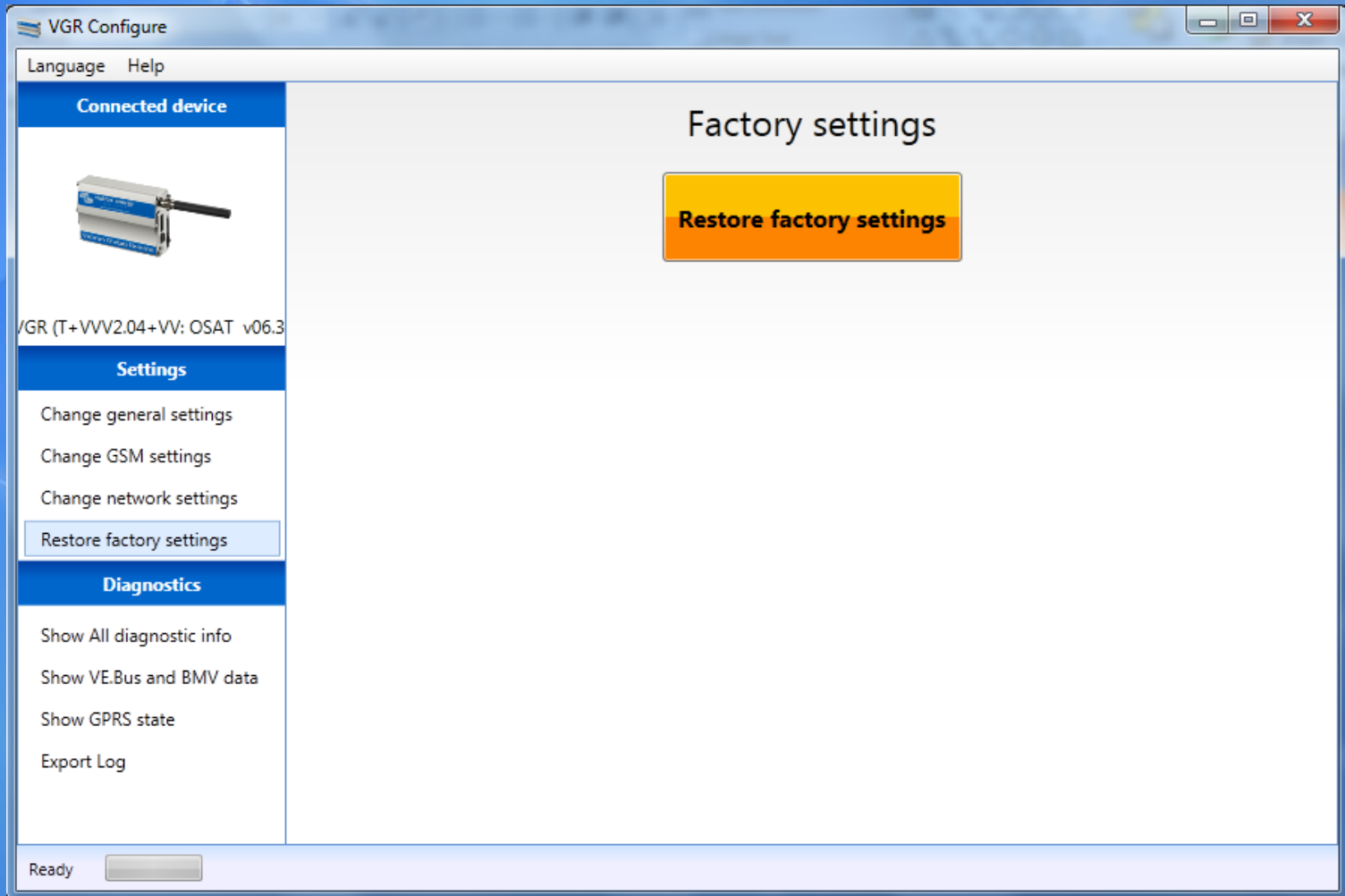
VGR Configure software

Network settings:



VGR Configure software

Reset to factory settings:



Remote VEConfigure

- Change VEConfigure settings over the air
- Can be done with the Victron Global Remote 2 and the Victron Ethernet Remote
- This is not possible with old Global Remote's ("Victron Global Remote")
- Make sure to use the latest version of VEConfigure2
- See also the manual on our website at the VGR and VER pages: "Manual – Remote VEConfigure".

Remote VEConfigure – procedure example

1. Read settings

```
veconf read
```

```
Veconf in progress...
```

```
Reading .vsc for dev 1 is succeeded
```

2. Go to the VRM website and download the .VSC file
3. Change the settings in VEConfigure
4. Upload them back to the website

Remote VEConfigure – procedure example

5. Write settings

```
veconf write
```

```
Veconf in progress...
```

```
Writing .vsc for dev 1 succeeded
```

Finished! Now the VE.Bus system has been updated with the new settings made.

Remote VEConfigure – procedure example

How can we find out how many devices are in a system?

```
veconf devnum
```

```
Number of devs is 1!
```