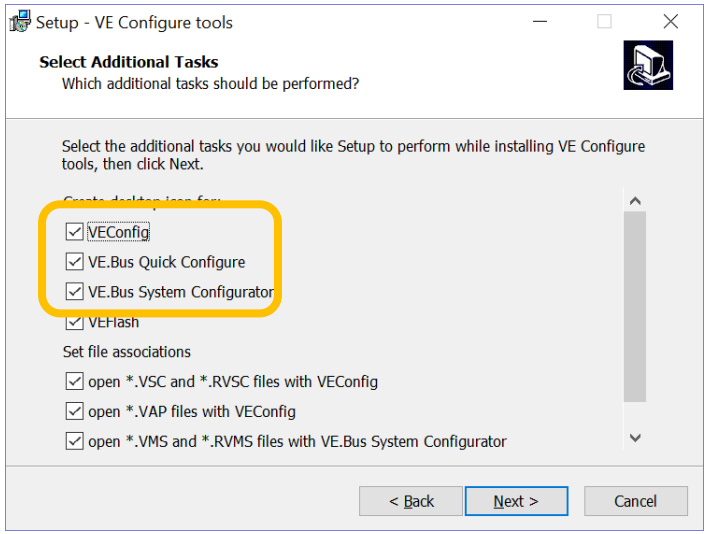
System configuration

Software needed for programming

Victron Connect is used for updating firmware

VE configuration tools for VE.Bus Products contains:

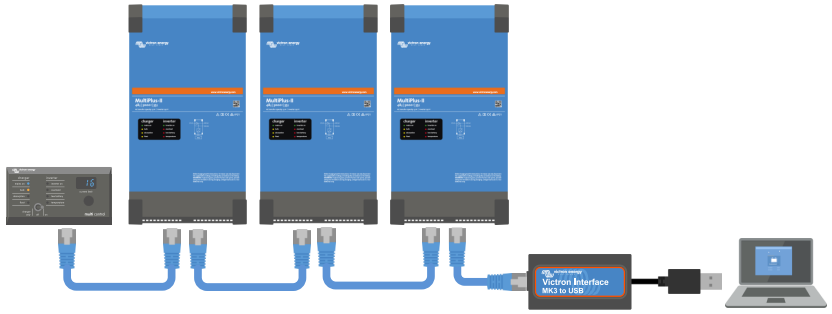
- **VEConfigure 3** is used for system settings
- **VEBus Quick Configure** or **VEBus System Configurator** are used to set up 3-phase and/or parallel systems

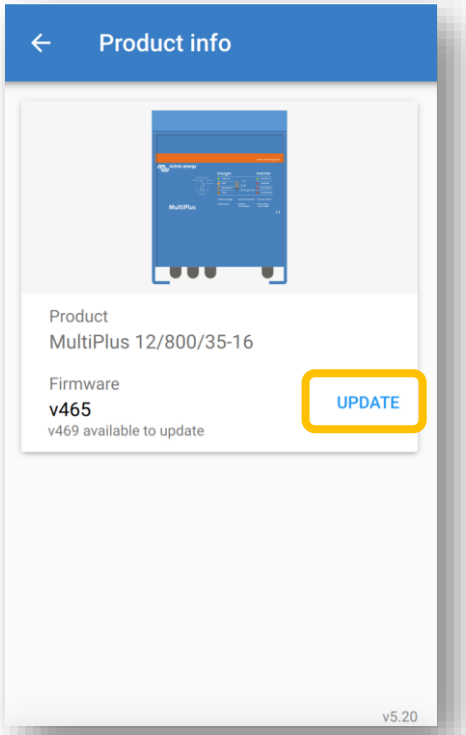


Software is available from the Victron downloads page:
https://www.victronenergy.com/support-and-downloads/software

Before programming

- Update all units to the latest firmware version
- Interconnect the units with RJ45 cables
- Connect a MK3-USB interface

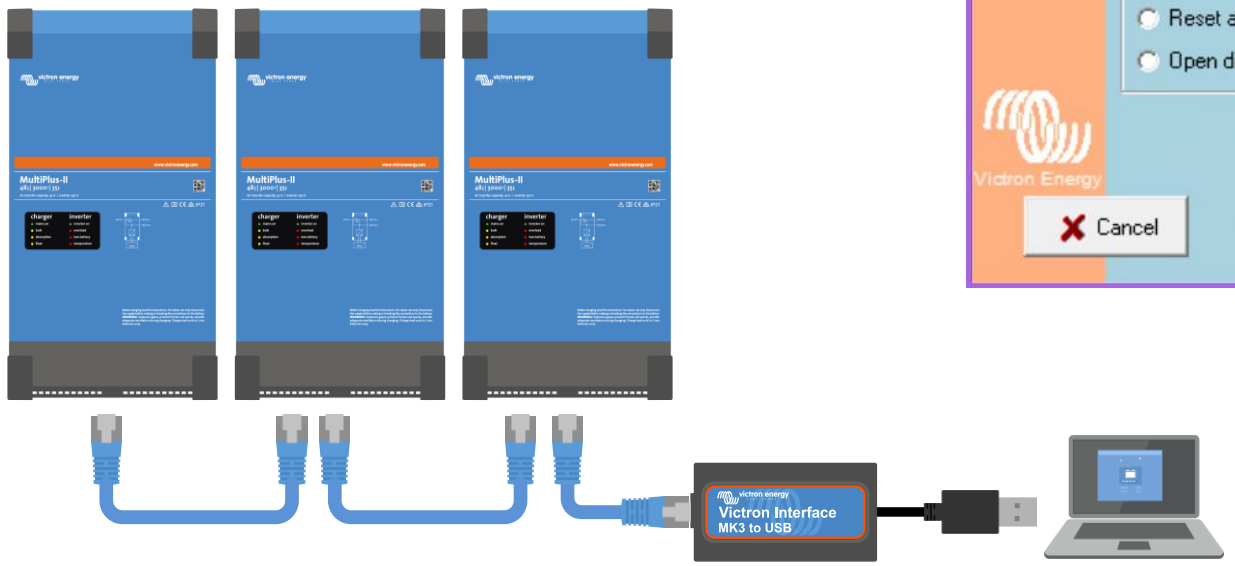


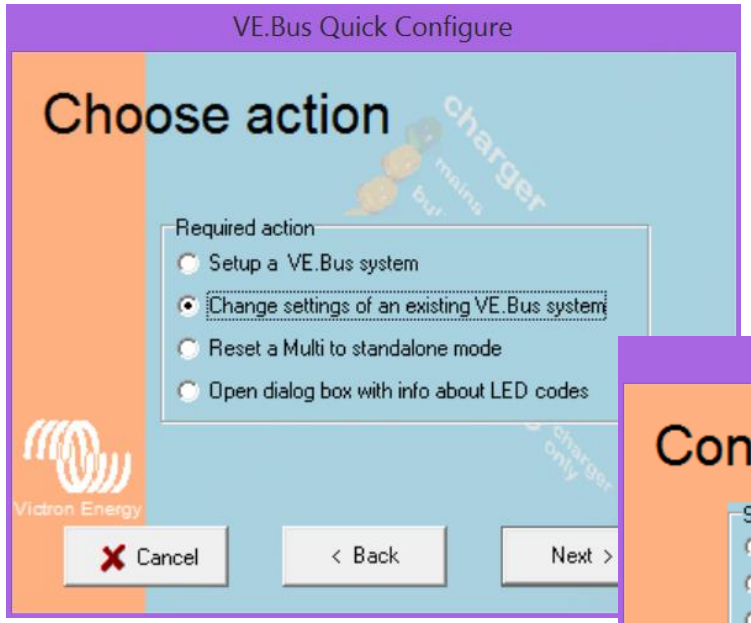


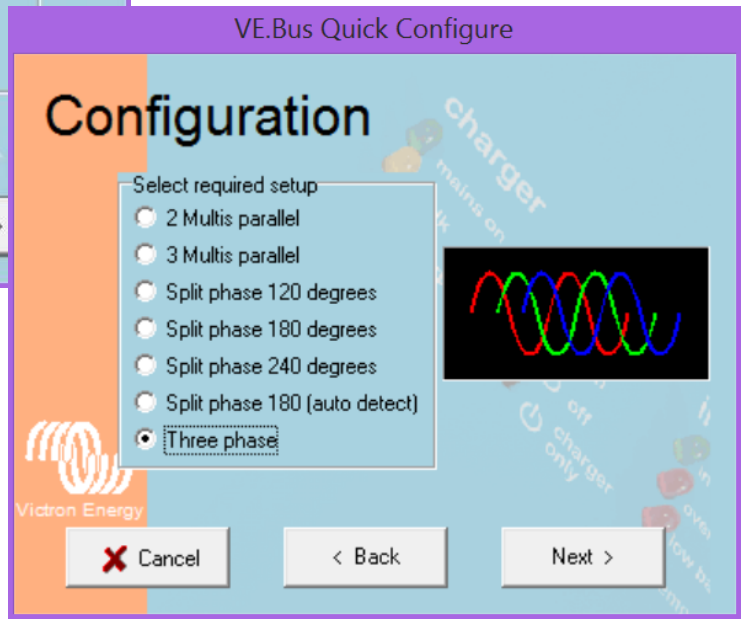
- Make sure the GX device is disconnected.
- If the system will be using a Digital MultiControl it will need to be connected during programming
- In a 3-phase system the AC out neutrals will need to be connected

VEBus quick configure -

- For systems up to 3 units
- 3-phase, split phase or parallel

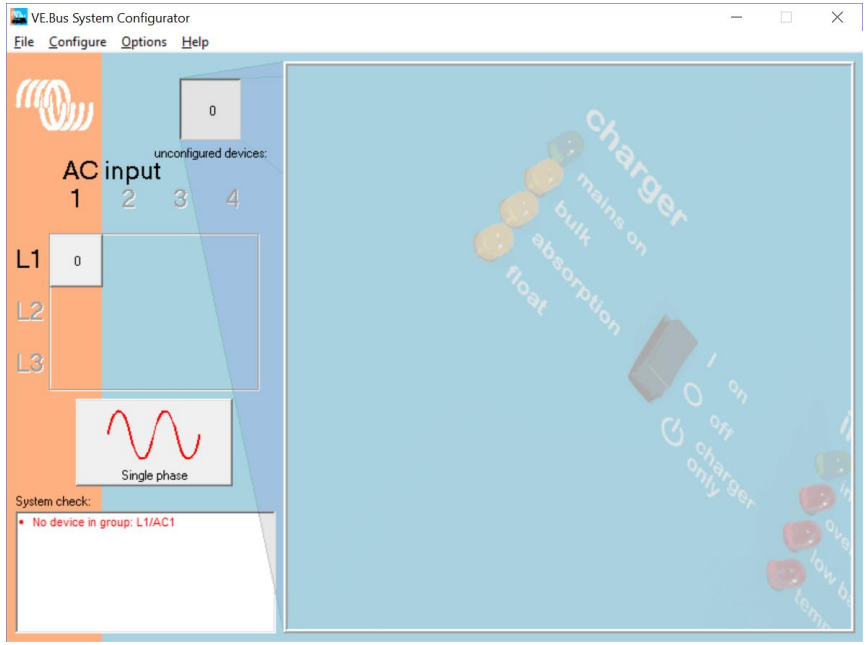


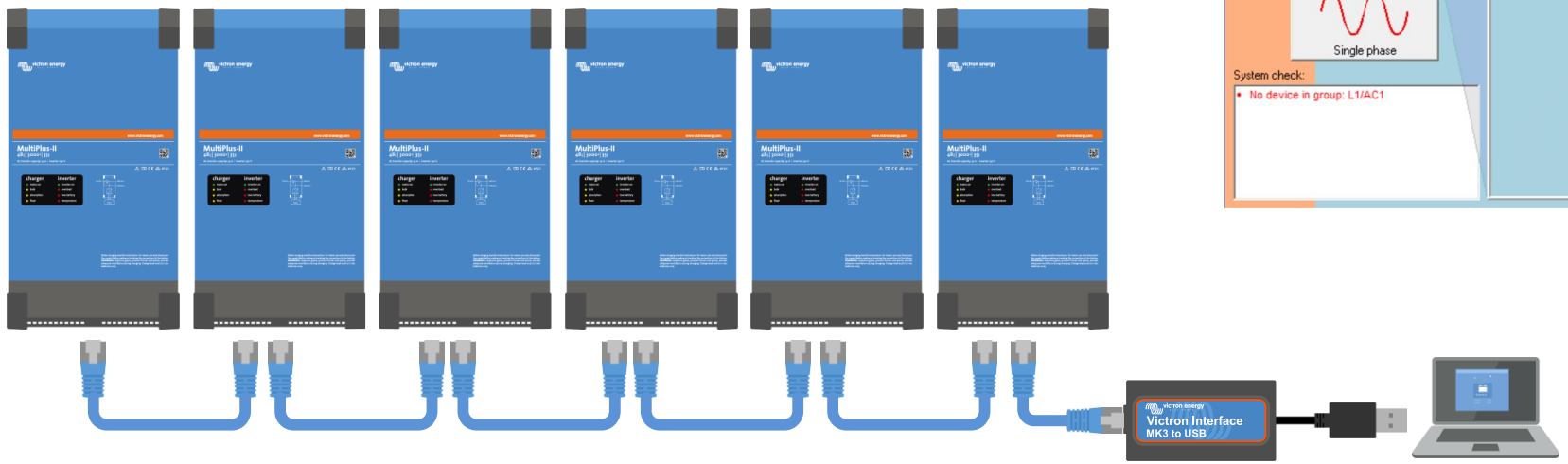




VEBus system configurator -

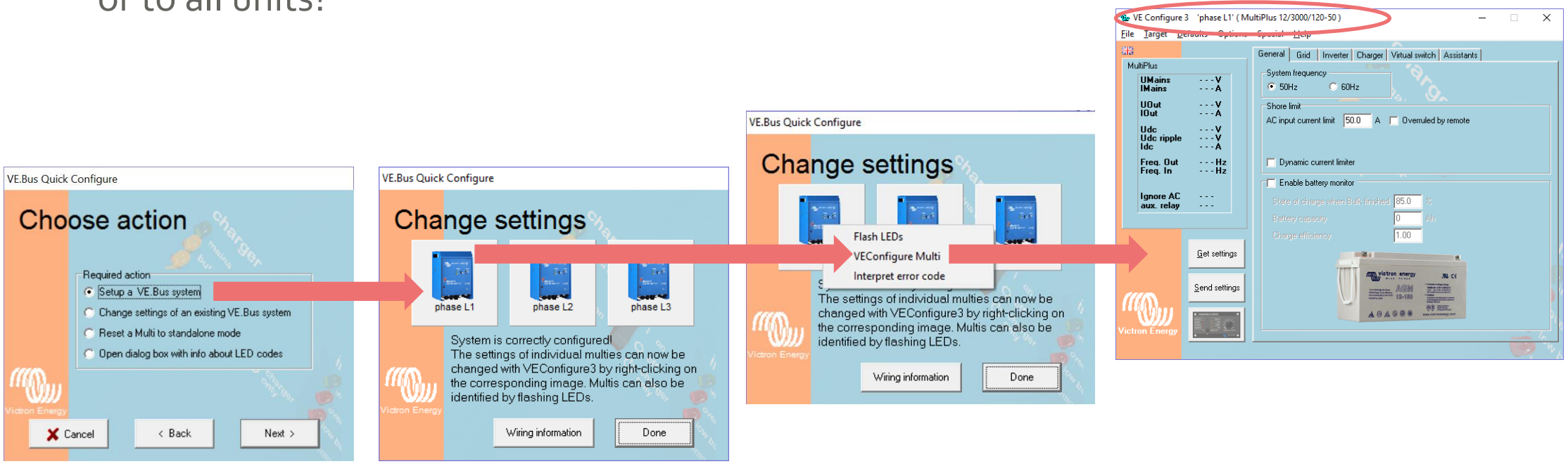
- For systems with 4 or more units
- For special systems , like 1-phase in and 3-phase out





VEConfigure

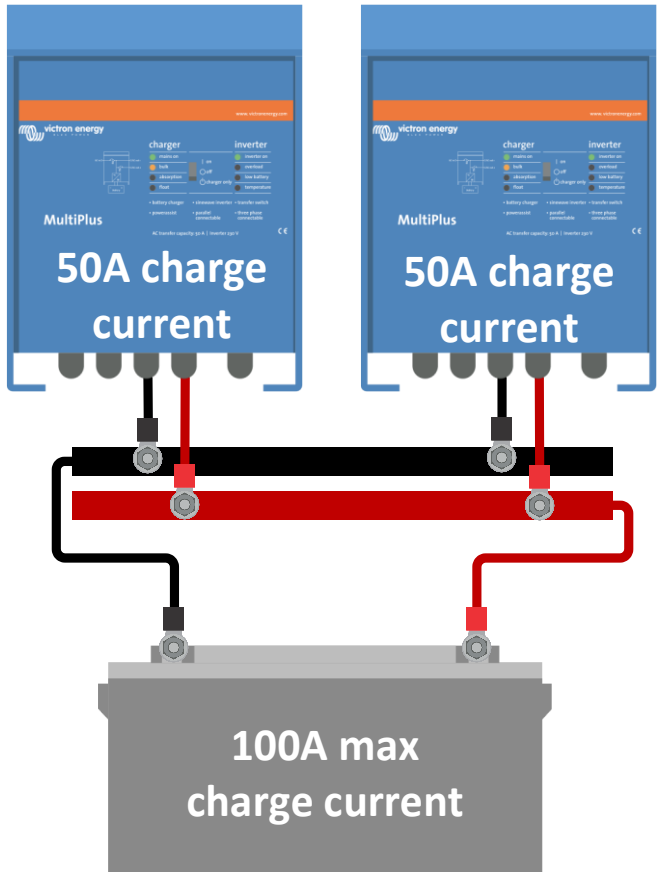
- The final settings are done via VE.Configure.
- Use a VE.Bus program to access the VE configure settings
- VE.Configure will ask you to send the settings to this unit or to all units?



VE.Configure master of L1

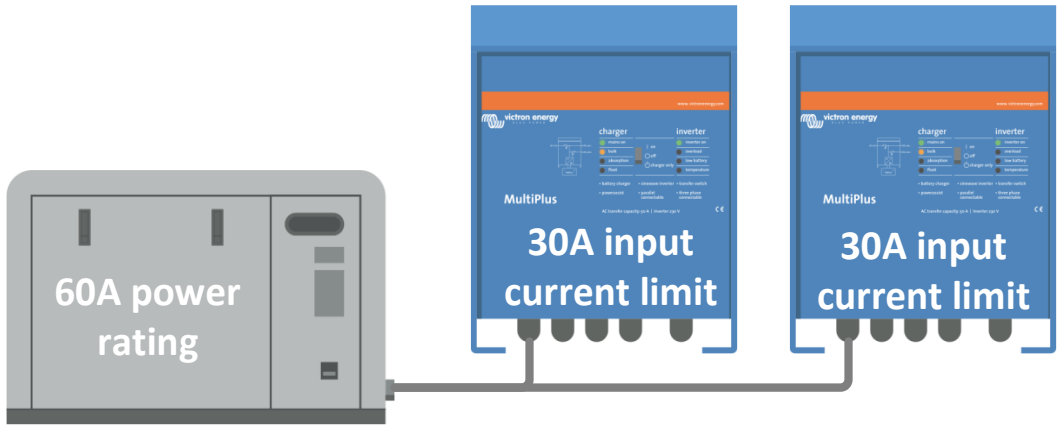
- System frequency
- Ignore AC input function
- Weak LOM
- All charger settings, such as:
    - Absorption voltage
    - Float voltage
    - Charge current

Note: The maximum charge current multiplied by the number of units in the system. Example: To get a 450A maximum charge current in a 9 unit system set the charge current to 50A per unit



VE.Configure master of each phase

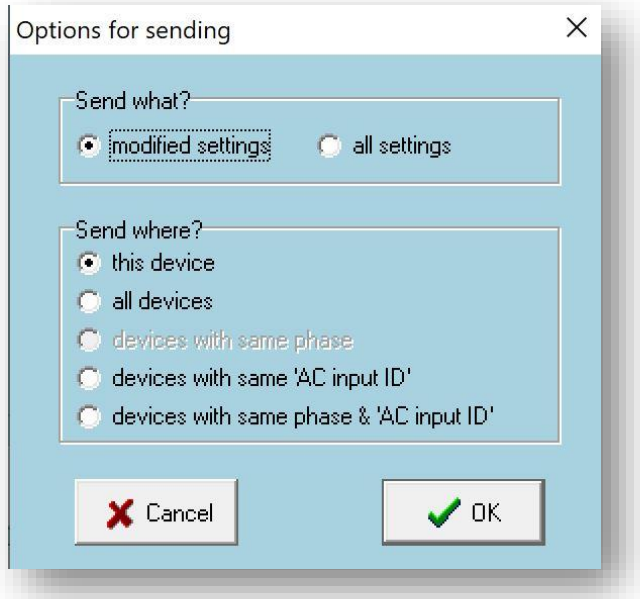
- Inverter output voltage
- UPS function on/off
- Power Assist settings
- Accept wide input frequency range
- Input current limit(s)



Note: The input current limit used by the system is multiplied by the number of units in the system. For example; a current setting of 30A in two Multis means a total current limit of 60A. This multiplication factor is also used by the remote control panel or GX device. It is possible to set a different input current limit per phase.

VE.Configure each unit

- Country/grid code standard or grid related values (AC high/ low values)
- DC input low shut-down values
- Virtual switch settings (with exception of AC ignore)
- All assistants
- Note that the programable relay and K relay(s) can be uniquely programmed in each unit.



- A quick way to make settings in all units is use the "send to all units" feature.

VE.Bus error codes

- A VE.Bus error code is a blinking inverter LED in combination with a charger status LED
- The blinking is always in anti phase! If LEDs blinks in phase it is NOT an error

- If one or more systems shut own after a fault or alarm, all units have to be switched off and back on again!
- If there is an alarm in a one of the units of a 3-phase system, like low battery, overload, temperature or ripple, all units will switch off.
- The GX device will tell you in which phase the alarm occurred.

Error overview

For a list of the VE.Bus error codes see:

- The manual of the Multi or Quattro
- The VE.Bus Quick configure software
- The Toolkit App

- VE.Bus error code document: https://www.victronenergy.com/live/ve.bus:ve.bus_error_codes