Victron & Pytes

1. Product & System compatibility

1.1 A GX device is required, eg Cerbo GX, etc

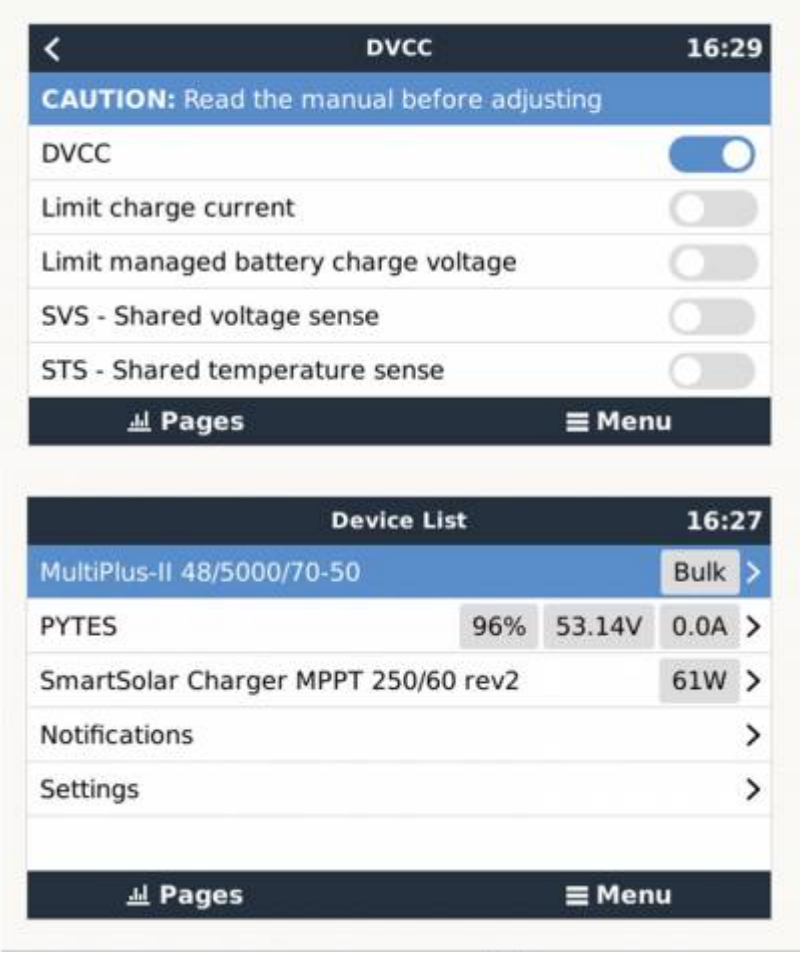
It is essential to use the BMS-Can (500 kbit/s) connection type of a GX device with these batteries for communication of charge and discharge limits, error codes and state of charge.

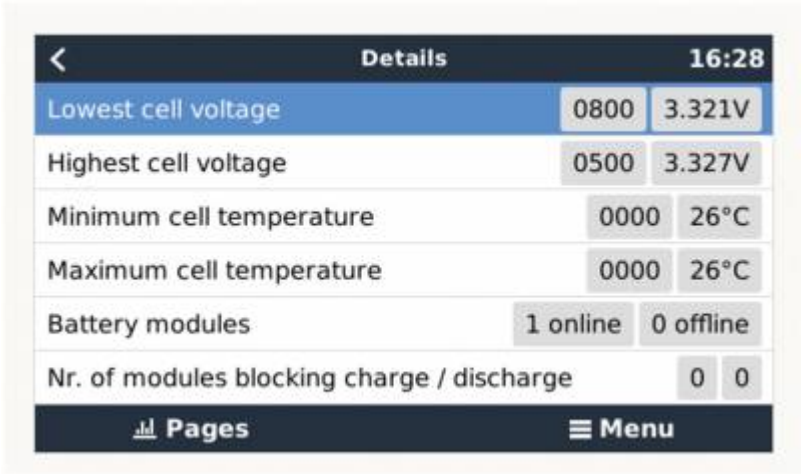
It is possible to use either the BMS-Can or VE.Can ports with this battery. Depending which one you use will require additional configuration on the batteries side, please see the documentation linked below for instructions.

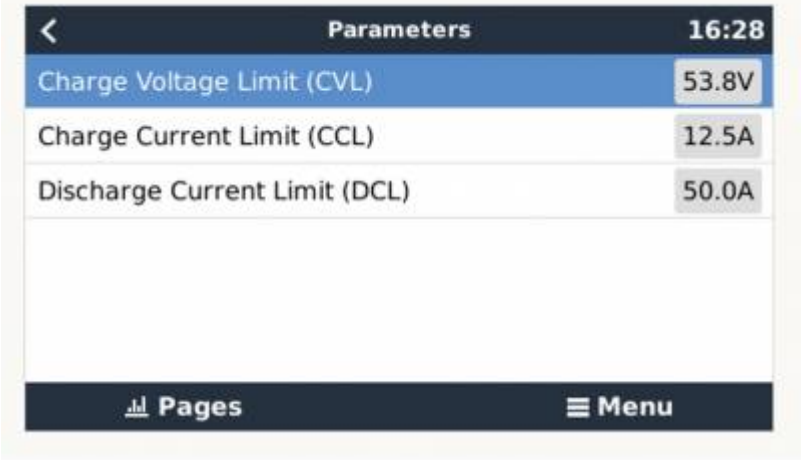
The minimum supported GX firmware version is v3.31. It is recommended to use the latest firmware version on new installations and when trouble shooting issues.

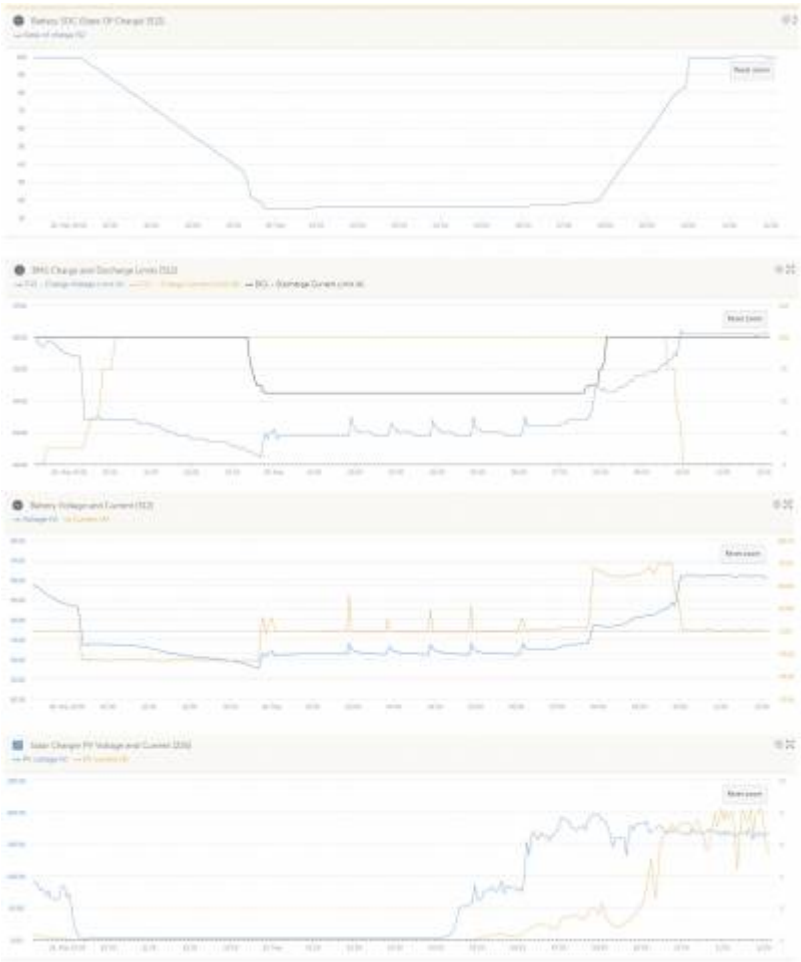
The minimum supported Pytes firmware version is 1.10.18. This is displayed at v18.1 on the GX device and VRM.

Connecting a Pytes battery to the GX device will require enabling DVCC, and disabling SVS and STS.




Details
16:28
Lowest cell voltage
0800
3.321V
Highest cell voltage
0500
3.327V
Minimum cell temperature
0000
26°C
Maximum cell temperature
0000
26°C
Battery modules
1 online
0 offline
Nr. of modules blocking charge / discharge
0
0
Pages
Menu


Parameters
16:28
Charge Voltage Limit (CVL)
53.8V
Charge Current Limit (CCL)
12.5A
Discharge Current Limit (DCL)
50.0A
Pages
Menu



1.2 CAN-Bus wiring between the battery and GX Device

Use the *VE.Can to CAN-bus BMS type A Cable*, part number ASS030710018.

Plug the side which is labeled Battery BMS into the Battery BMS. Plug the side labeled Victron VE.Can into the GX device.

Then plug a VE.Can terminator in the other VE.Can socket on the GX device. Two VE.Can terminators are included with the package of the GX device as an accessory, only one is used. Keep the other one as a spare.

More information about the cable can be found in its manual.

Without properly connecting this cable, the battery will not show up on the display of the GX device.

It is important to ensure this connection and display of the battery on the GX device display before attempting firmware updates or settings changes on other devices if they depend on the power supply from the battery. DO NOT attempt to operate the battery cells normally without connection to the BMS.

1.3 All 48V Multis, MultiPlus, Quattros and RS models are compatible

The minimum supported firmware version for VE.Bus models is 469. Minimum supported firmware for RS models is 1.16. Updating to the latest firmware is recommended for new installations, and troubleshooting issues.

These VE.Bus inverter/charger units must be connected to the GX device via the VE.Bus connection port.

In grid connected systems, advanced control functions are configurable in the ESS settings on the GX device.

In off-grid systems, the control functions of the Battery Management System (BMS) are built into the latest version of the GX device.

1.4 Solar Charger compatibility

All 48V BlueSolar and SmartSolar MPPT Chargers are compatible.

Some of our Solar Chargers feature a VE.Direct communication port, some feature a VE.Can communication port, and some feature both. Both of these types of communication ports can be used to connect the Solar charger to the GX Device. Such connection is mandatory, because it is used to regulate charge currents and voltages.

2. Minimum battery sizing

For reliable operation there are minimum numbers of batteries required for different Victron inverters.

Please contact your battery supplier for these specifications.

3. Further system integration documentation

Installation and configuration manual with Victron Energy

Pytes Victron Guide

Victron VE.Configure3 settings with Pytes

Ebox Series manual

Further details about installation and configuration is available from your battery manufacturer.

Improvements CVL (Charge Voltage Limit) regulation were added to Pytes firmware versions 1.10.18. Earlier versions will still connect but are not supported, and may charge/discharge cycle when at 100% state of charge.

4. Support

Support for this battery should first come from your battery supplier. Pytes has a service email at ess_support@pytesgroup.com

Support from Victron is limited our online Victron Community page.