Color Control GX

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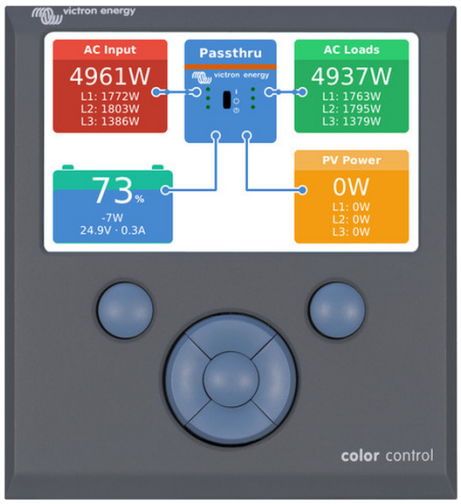
The Color Control (CCGX) provides intuitive control and monitoring for all Victron power systems. The list of Victron products that can be connected is endless: Inverters, Multis, Quattros, MPPT solar chargers, BMV battery monitors, Lynx Ion + Shunt and more.

VRM Online Portal
Besides monitoring and controlling products locally on the CCGX itself, all readings are also forwarded to our free remote monitoring website: the VRM Online Portal. To get an impression, try the demo on https://vrm.victronenergy.com. See also the screenshots below.

Remote Console on VRM
Monitor, control and configure the CCGX remotely, over the internet. Just like standing in front of the device, everything can also be done remotely. The same functionality is also available on the local network, Remote Console on LAN.

Automatic genset start/stop
A highly customizable start/stop system. Use state of charge, voltage, load and other parameters. Define a special set of rules for quiet times, and optionally a monthly test run.

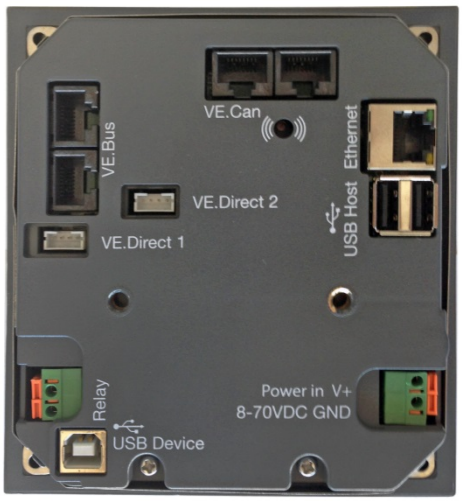
The heart of ESS – Energy Storage System
The CCGX is the Energy Manager in an ESS system. More information in the ESS manual: https://www.victronenergy.com/live/ess:design-installation-manual



Data logging
When connected to the internet, all data is sent to the VRM Portal. When there is no internet connection available, the CCGX will store the data internally, up to 48 hours. By inserting a micro SD-card or USB stick, more data can be stored. These files can then be uploaded to the VRM Portal, or offline converted with the VictronConnect app, for analysis.

Supported products
- Multis and Quattros, including split-phase and three-phase systems. Monitoring and control (on/off and current limiter). Changing configuration is possible (only remotely via the internet, not without an internet connection).
- BlueSolar MPPT Solar Chargers with a VE.Direct port.
- BlueSolar MPPT 150/70 and the MPPT 150/85 with VE.Can port.
- SmartSolar MPPT 150/70 and the MPPT 150/100 with VE.Can port. When multiple BlueSolar MPPTs or SmartSolar MPPTs with VE.Can are used in parallel, all the information is combined as one. See also our blog-post about synchronizing multiple MPPT 150/70 solar chargers.
- BMV-700 family can be connected directly to the VE.Direct ports on the CCGX. Use the VE.Direct Cable for this.
- BMV-600 family can be connected to the VE.Direct ports on the CCGX. Requires an accessory cable.
- Lynx Ion + Shunt
- Lynx Shunt VE.Can
- Skylla-i battery chargers
- NMEA2000 tank sensors
- A USB GPS can be connected to the USB port. Location and speed will be visible on the display, and the data is sent to the VRM Portal for tracking purposes. The map on VRM will show the latest position.
- Fronius PV Inverters

When more than two VE.Direct products must be connected, USB can be used.



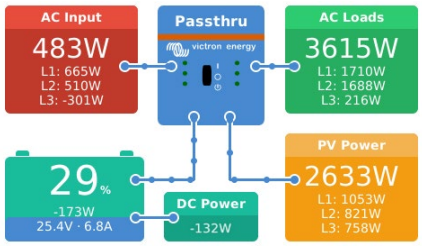
Internet connection
The CCGX can be connected to internet with an Ethernet cable and via wifi. To connect via wifi, a wifi USB accessory is required. The CCGX has no internal cellular modem: there is no slot for a sim-card. Use an off-the-shelf GPRS or 3G router instead. See the blog post about 3G routers.

Other highlights
- The CCGX can automatically update itself from the internet, when there is a new software version available.
- Multiple languages: English, Czech, German, Spanish, French, Italian, Dutch, Russian, Swedish, Turkish, Chinese, Arabic.
- Use the CCGX as a Modbus-TCP gateway to all connected Victron products. See our Modbus-TCP FAQ for more information.
- Powered by the Venus OS – embedded linux. https://github.com/victronenergy/venus/wiki/sales-pitch

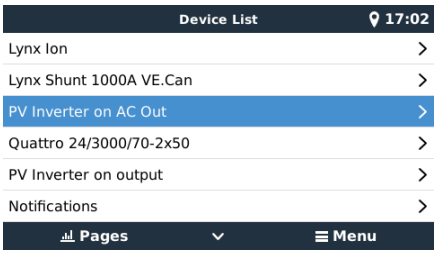
Color Control GX

Color Control GX			
Power supply voltage range	8 – 70V DC		
Current draw	12V DC	24V DC	48V DC
Display off	140mA	80mA	40mA
Display at minimum intensity	160mA	90mA	45mA
Display at maximum intensity	245mA	125mA	65mA
Potential free contact	3A / 30V DC / 250V AC (Normally open)		
	Communication ports		
VE.Direct	2 separate VE.Direct ports – isolated		
VE.Can	2 paralleled RJ45 sockets – isolated		
VE.Bus	2 paralleled RJ45 sockets – isolated		
USB	2 USB Host ports – not isolated		
Ethernet	10/100/1000MB RJ45 socket – isolated except shield		
	3rd party interfacing		
Modbus-TCP	Use Modbus-TCP to monitor and control all products connected to the Color Control GX		
JSON	Use the VRM JSON API to retrieve data from the VRM Portal		
	Other		
Outer dimensions (h x w x d)	130 x 120 x 28mm		
Operating temperature range	-20 to +50°C		
	Standards		
Safety	EN 60950-1:2005+A1:2009+A2:2013		
EMC	EN 61000-6-3, EN 55014-1, EN 61000-6-2, EN 61000-6-1, EN 55014-2		
Automotive	E4-10R-053535		

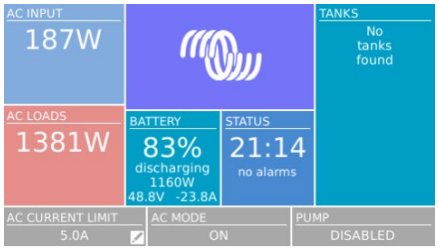
Overview - Multi with PV Inverter on output



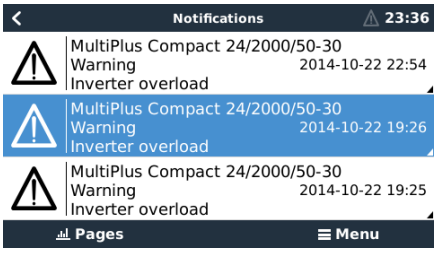
Main menu



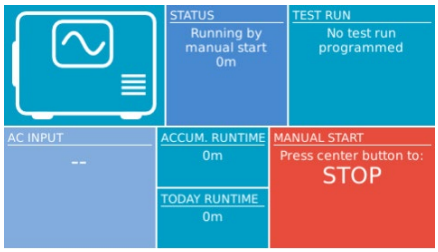
Mobile & boat overview



Alarm notifications



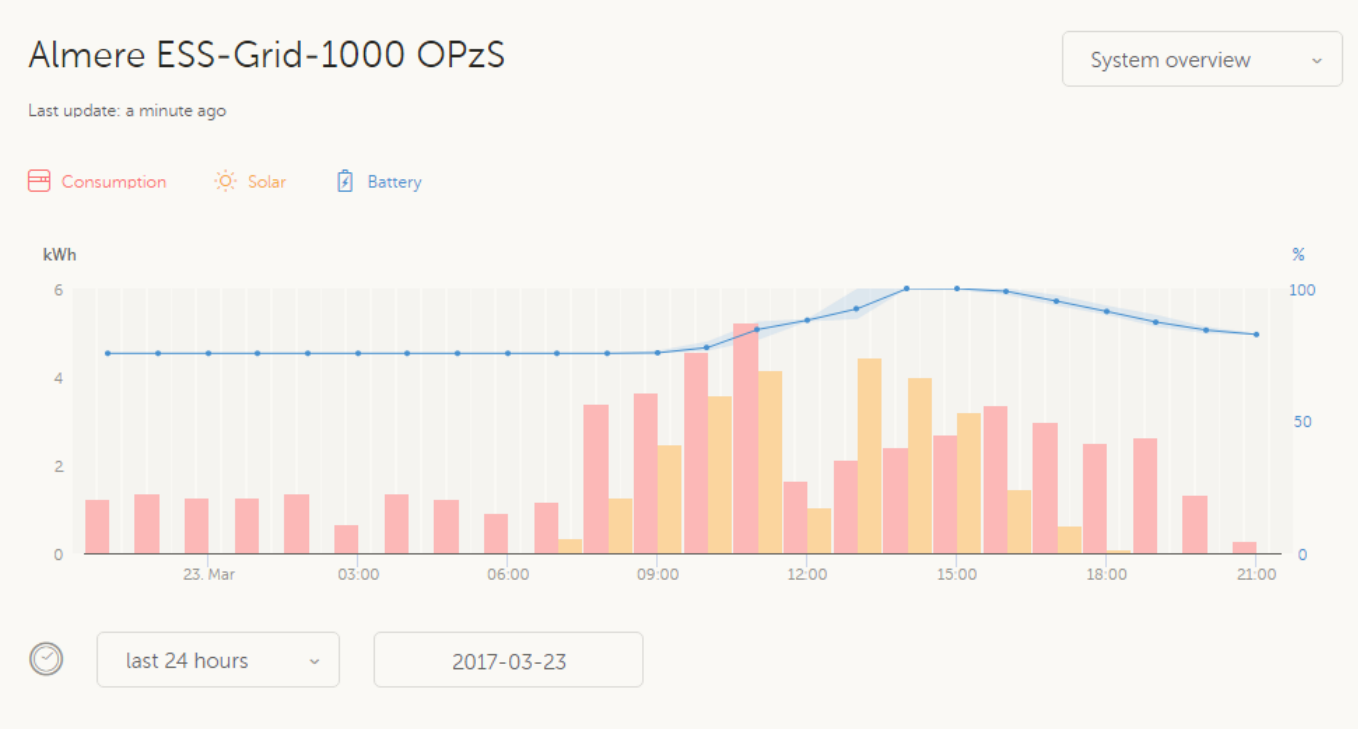
Genset control page



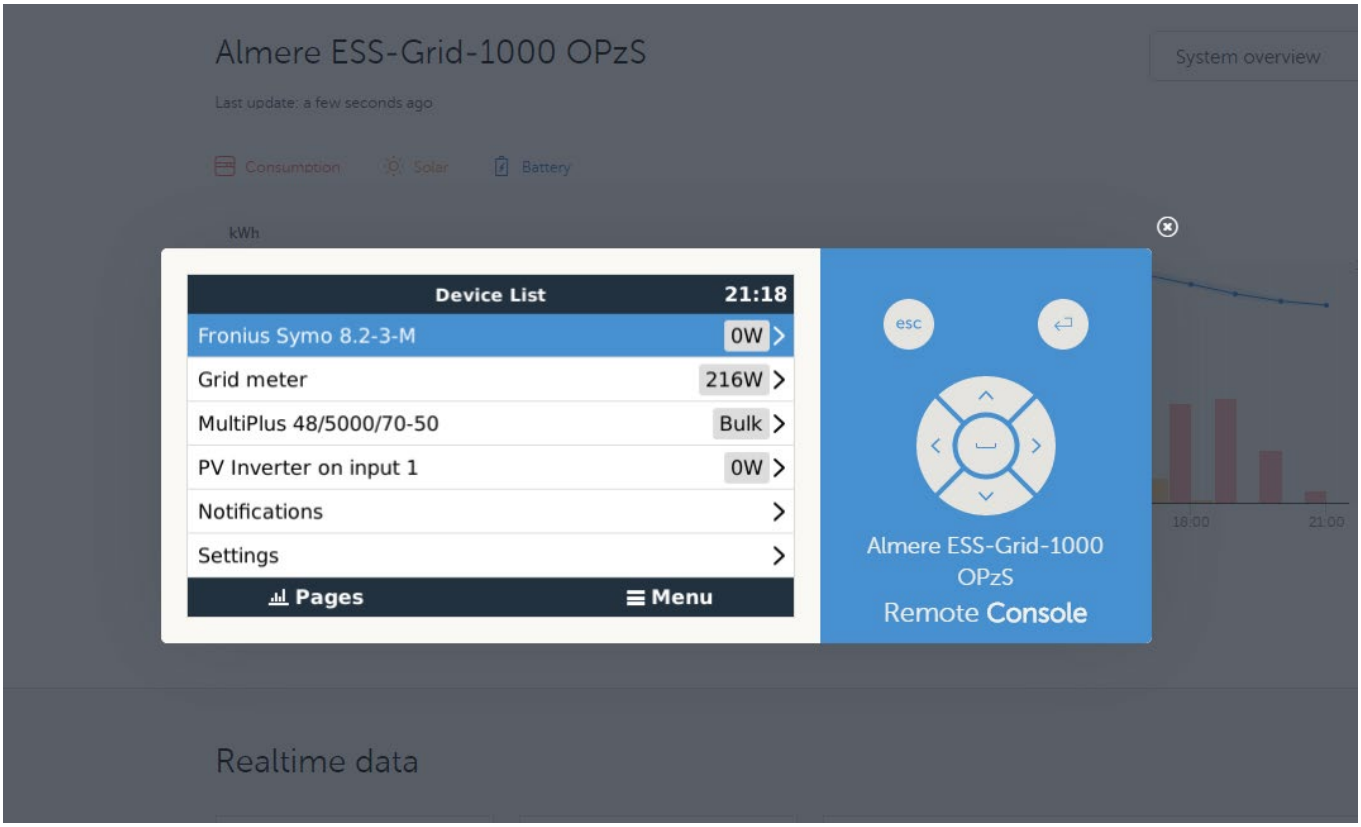
Tiles overview

Color Control GX

VRM Portal - Dashboard



VRM Portal – Remote Console



Color Control GX

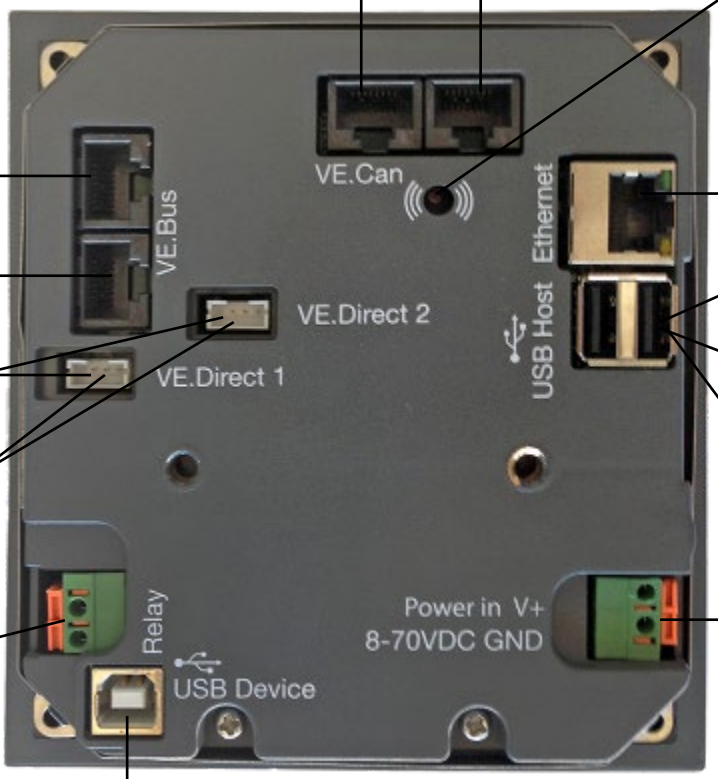
Multi and Quattro Inverter/Charger
Singe, parallel, three-phase and split-phase.

Skylla-i

MPPT 150/70 and MPPT 150/85

VE.Can RJ45 terminators

Alarm buzzer



Digital Multi Control

MPPT 75/15 up to 250/100

BMV-700 or BMV-712 Smart

Ethernet
Connect to internet router

Wifi
Connect to internet router

GPS

USB stick
Used for manually updating firmware and for data logging.

To battery

Potential free contact:
- alarm signaling
- automatic generator start/stop

Not used

MicroSD Card
Used for manually updating firmware and for data logging. When panelmounted, this slot is accessible from the front.