VictronConnect changelog and beta releases

During beta-testing of a new VictronConnect release, its details will be listed at the top of this page. Once released officially, all beta release notes are condensed into one full release note.

More information about VictronConnect, including manuals, is here: https://www.victronenergy.com/panel-systems-remote-monitoring/victronconnect.

Please report bugs and give feedback to these betas via the Disqus comments below. Note that comments are not public by default, and first go to a moderation queue.

Changelog

(Currently available betas are on top. See further below for official releases.)

v6.50beta8

2026-09-18

Download links:

- iOS: Join TestFlight https://testflight.apple.com/join/cvufYMEh
- Android via Google Play Store:
  - It is necessary to follow below steps
  - 1. Join beta testing group on this link
  - 2. Join VictronConnect beta on Google Play Store
- Windows 10 and higher
- macOS 11 (Big Sur) and higher
- Linux AppImage

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Changes

iOS:

- Add Apple CarPlay support. (Bluetooth)

Android

- Improve Bluetooth device scanning
- Notify when Bluetooth scanning cannot be initiated

GX Remote Console * Significantly improve loading time

EVCS

- Add new errors and warnings
- Add local firmware updates via Ethernet (EVCS V2 only — requires a future firmware release)
- Add Instant Readout support for remote connections

MultiHS

- Fix Grid Feed-In settings visibility

v6.50beta7

2026-09-14

Changes

EVCS

- Add firmware v2.08

OrionXS

- Further improvements to the Emergency Charge feature (requires a future firmware release)

v6.50beta6

** 2026-09-11 **

Changes

General

- Enable VRM data tabs on locally connected GX devices
- List GlobalLink installations alongside GX remote installations (VRM tab)
- Make it possible to create a VRM installation directly from VictronConnect
- Add VRM account creation in the Remote tab and Settings
- Add VRM login directly within VictronConnect
- Speed up Remote Console loading after the first load
- Various UI wording improvements as part of the continued VRM integration in VictronConnect

OrionXS

- Further improvements to the Emergency Charge feature (requires a future firmware release)

MultiHS

- Hide certain not yet supported settings

v6.50beta5

** 2026-09-3 **

Changes

General

- Improved overall performance

OrionXS

- Improved the Emergency Charge feature (requires a future firmware release)

v6.50beta4

** 2026-08-31 **

Changes

General

- Improved overall performance
- Fixed a crash that could occur when loading saved settings files for certain products
- Fixed incorrect timestamps when exporting CSV trend data in regions with negative UTC offsets

Windows

- Fixed an issue where a VictronConnect process could remain running in the background under certain circumstances

EVCS

- Added support for upcoming features that require a future firmware release

Lynx Smart BMS

- Added more detailed information when charging or discharging is not allowed (Requires a future firmware release).
- Added support for new alarms introduced in a future firmware release

MultiRS

- Add firmware v1.32 for Multi RS Smart 48/6000

v6.50beta3

** 2026-08-19 **

Changes

General

- Added trends data export to CSV on products that support stored trends
- Internal improvements

Android

- Improve battery usage for home screen widgets and alarm notifications.
- Fix Android reporting VictronConnect as crashing in the background on some phones.

BMV/SmartShunt

- Fix manual SOC setting when the reported SOC is undefined

v6.50beta2

** 2026-08-05 **

Changes

General

- Internal improvements

Android

- Fixed a Bluetooth issue that could prevent the device list from being displayed under certain conditions

EVCS

- Added password-less pairing with GX devices (requires Venus OS v3.80)
- Improved GX Communication settings

MultiHS

- Added support for Instant Readout

v6.50beta1

** 2026-07-27 **

Changes

General

- Improved trend data time accuracy
- Added support for viewing stored trend data via MQTT from backup files
- Reduced trend loading time after the initial connection

Android

- Fixed a crash on devices with a 64-bit CPU running a 32-bit OS

Android & iOS

- Improved device list responsiveness

OrionXS

- Added support for the Emergency Charge feature (requires a future firmware update that is not yet available)

MultiHS

- Added support for PV Tracker enabling settings

v6.42 (Released officially)

** 2026-09-09 **

Download links:

- iOS: App Store
- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store
- Linux AppImage

Firmware updates: For more details, check release notes on Victron Professional.

Changes

Lynx Smart BMS - Added more detailed information when charging or discharging is not allowed (Requires a future firmware release). - Added support for new alarms introduced in a future firmware release

Android - Fixed an issue where the device list could remain empty under certain conditions on some Android devices and versions.

iOS - Improved battery usage on recent versions of iOS

v6.41 (Released officially)

** 2026-08-25 **

Changes

General

- Improve batch programming robustness

Android

- Improve battery usage for home screen widgets and alarm notifications.
- Fix Android reporting VictronConnect as crashing in the background on some phones.

EVCS * Various improvements

BMV/SmartShunt

- Fix manual SOC setting when the reported SOC is undefined

Lynx SmartBMS

- Add support for new alarms to be introduced in a future firmware release

MPPT Solar Chargers:

- Add firmware v1.75 for some models

v6.40 (Released officially)

** 2026-07-21 **

Changes

General

- Added dark mode support and improved appearance throughout the app
- Added support for new products and expanded device compatibility
- Improved VRM page loading and synchronization
- Improved trend graphs accuracy, scaling, and robustness
- Improved remote console experience, including portrait mode support
- Updated the built-in firmware library with the latest firmware files
- Various fixes and internal improvements

Windows

- Added Bluetooth connectivity support
- Added automatic update settings

Android & iOS

- Improved handling of on-screen keyboards and system bars
- Improved navigation and remote console usability

SolarSense

- Added history export to CSV

Energy Meter

- Improved energy data accuracy and value scaling
- Added support for additional Energy Meter models and settings

VE.Bus Inverters

- Added support for Multi units with a Q processor

MultiRS / InverterRS

- Added new settings

MultiHS

- Added new settings

v6.34 (Released officially)

** 2026-06-09 **

Changes

Solar Chargers:

- Add PV short relay protection information to “Why is the charger off?”

v6.33 (Released officially)

** 2026-05-27 **

Changes

- Make it possible to inspect a settings file created with a different product firmware version.

GX:

- Improve VRM content loading

Sun Inverter:

- Fix output voltage setting

v6.32 (Released officially)

- Fix trends can freeze at “fetching” state in certain situations
- Android auto: Improve stabilty of the products list
- Android widgets: Fix accuracy of the displayed last contact time

VE.Bus inverter/charger:

- Fix firmware update can fail reporting error 29

v6.31 (Released officially)

** 2026-03-23 **

Download links:

- iOS: App Store

- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store
- Linux AppImage

Firmware updates: For more details, check release notes on Victron Professional.

- Fix trends showing incorrect dates in certain conditions
- Fix live trends when connected via a VE.Direct Smart Dongle
- Improvements to firmware library synchronization
- Fix “Remove” option not always shown for user-added firmware

BMV-712:

- Fix some display settings not being exported to settings files

MultiRS:

- Export discharge current limit to settings files
- Add error 77: Settings sync disabled

SolarSense:

- Fix incorrect kWh scale on the history page

v6.30.3 (Released officially)

** 2026-02-27 **

This version is only available for Windows, macOS and Android.

Changes

Windows

- Fix VE.Bus firmware list do not show available update files.

v6.30.2 (Released officially)

** 2026-02-26 **

This version is only available for Windows.

Download links:

- Windows 10 and higher

Changes

Windows

- Fix firmware updating to the latest version from the product info page.

v6.30.1 (Released officially)

** 2026-02-25 **

This version is only available for Android.

Download links:

- Android

Changes

Android

- Fix rendering issues on phones using PowerVR GPUs
- Fix an issue that sometimes causes the app to hang on the splash screen

v6.30 (Released officially)

** 2026-02-23 **

Download links:

- iOS: App Store
- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store
- Linux AppImage

Firmware updates: For more details, check release notes on Victron Professional.

VRM Integration (New Feature)

- View VRM dashboards and overview graphs directly within the app.
- Remote Console now opens inside VictronConnect rather than an external browser.

Online Firmware Library (New Feature)

- When available firmware update release notes are shown before and during the firmware update process.
- VictronConnect now automatically syncs its internal library when internet is available. Firmware updates can still be carried out without an internet connection, just like before.

Batch Programming (New Feature)

- Allows firmware updates and settings programming for multiple units of the same model in one operation.
- Supported Platforms: VE.Direct (Windows, macOS, Android) and Bluetooth (Android, iOS).

Android Auto (New Feature)

- View Instant Readout data from Victron products on your vehicle's display.

Android Widgets and alarm notifications (New Features)

- Home Screen Widgets: Add your favorite products to your phone’s home screen for quick access to key information at a glance.
- Alarm Notifications: Receive phone notifications for nearby products triggering alarms via Bluetooth.
- Both the widgets and notifications features use Instant Readout and require you to be in Bluetooth range to get data updates.

Trends:

- New enhanced view for stored trends.
- Stored trends are now saved in the settings file and can be reviewed by loading the settings file.
- Various improvements in calculated trends.

EV Charging Station

- Self-Firmware Update: Added the ability for EVCS to check the internet for new firmware and trigger updates via VictronConnect.
- Added firmware v2.05
- Improved “Charging current” control usability.
- GX Connection (LAN & VRM): New support for accessing and configuring EVCS through a GX device
    - Requires firmware v2.06 (soon to be released) and Venus OS v3.70.

RS products:

- Add off reason 18 (by aux input) notification
- Add polarity selection for Aux Input settings (requires firmware over 1.27)
- (MultiRS / InverterRS) Add Max discharge current limit (requires firmware over 1.27)

- Add Inverter RS firmware v1.27
- Add MPPT RS firmware v1.27
- Add Multi RS firmware v1.28

Solar Chargers

- Add firmware v1.73 for five specific models.

Orion XS

- Add firmware v1.13 (for 1400 and 12V/12V-50A models).
- Add support for upcoming new models.

Lynx Smart BMS:

- Add firmware v1.15

Energy Meter VM-3P75CT

- Add firmware v1.11

VE.Bus Inverter/Chargers: A

- Add firmware v558 for various models

Linux:

- Improved handling of deep links.

Other changes:

- Improved handling of thousand separators in input fields. This solves issues on some reginonal configurations.
- Qt Framework Upgrade: This update brings numerous improvements and advantages that enhance your user experience and set the stage for new features in the future.

Minimum OS version requirements:

- Android:
  - Android 9 or higher: (previously Android 8)
- iOS:
  - iOS 16 or higher (previously iOS 14)
- Microsoft Windows:
  - Windows 10 or higher. (same as previous version)
- macOS:
  - macOS Monterey (12) or newer (previously macOS Big Sure (11))

v6.24 (Released officially)

** 2025-11-26 **

Download links:

- iOS: App Store
- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store
- Linux AppImage

Notes:

- Android: If you can't open the downloaded file from the downloads list try using a file browser.

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Changes

- Fix back button behaviour on certain Android versions
- Fix issues with the remote products discovery

Orion XS 1400:

- Orion XS 1400: Add firmware v1.13

SolarSense:

- SolarSense: Small fixes and improvements

BMV-600S:

- Fix BMW-600S not being shown through MQTT Connections

v6.23 (Released officially)

** 2025-10-20 **

Download links:

- iOS: App Store
- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store
- Linux AppImage

Notes:

- Android: If you can't open the downloaded file from the downloads list try using a file browser.

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Changes

- Fix numeric input values are not correctly validated on certain locales

EVCS:

- Add firmware v2.05

Energy Meter:

- Add firmware v1.11

Lynx Shunt:

- Improve calibration routine

Multi RS:

- Fix settings saved with v6.19 or earlier could fail to load

VE.Bus Inverter/Chargers:

- Add new MultiPlus-II models

v6.22 (Released officially)

** 2025-09-23 **

Changes

GX:

- Fix an issue where remote products are not displayed under certain conditions on Venus versions older than v3.50
- Fix an issue where a blank page is displayed on Venus versions older than v3.50 when VRM two-way communication is disabled

VE.Bus Inverter/Chargers:

- Update firmware library
  - Depending the model the latest firmware version is v556, v557 or v558

VE.Bus Smart Dongle:

- Fix AC output instant readout

Multi RS:

- Allow battery presets to set equalisation voltage to 0V

v6.21 (Released officially)

** 2025-09-18 **

Changes

VE.Bus Inverter/Chargers:

- Fix detailed view is not loaded when connecting via MK3

VE.Bus Smart Dongle:

- Fix settings button is not visible

EVCS:

- Add firmware v2.04:
  - Added “Online Updates” feature for firmware
  - Improvements to meet cybersecurity requirements
  - Improvements in Grid ON/OFF state detection
  - Improvements in handling 'Start/Stop charging' based on backup battery SoC levels
  - Fixed an issue causing a 2-second delay before power-off in the charged state
  - Fixed incorrect Gateway address in Wi-Fi AP mode

v6.20 (Released officially)

2025-09-17

Changes

General improvements

- Various performance and stability improvements
- Add copy action for Serial Number on Product Info page
- Numeric setting inputs UX improvements
- Text inputs (on mobile): easier to place the cursor in a defined position
- Fix Instant Readout showing the same data for two products in certain cases
- Fix an issue that makes impossible to select a manual added firmware file in certain situations

VRM Installations / GX on local network:

- New layout on mobile
    - GX details shown at the top for quick access to VRM and Remote Console
- “Remote console” button added for VRM Installations
- “Remote console” UI can be selected → Classic UI or New UI
- Add support for the recently added Favorites feature in VRM.
- Improve connection and fetching times
- Make VRM installations listing faster, solving an issue that can make VictronConnect to freeze for a while.
- Fix an error that could make the connection stuck at 40% when loading the products list
- Various robustness improvements
- Order products list by name
- VE.Bus inverter/charger: Add support for remote connection via VRM and local network. Monitoring only.

Inverter, Multi RS:

- Add “Self-consumption from battery” setting
- Disable the Ground relay when the Grid Code has the 'AC Neutral path externally joined'
- Fixes on data reads when System phase is L2 or L3
- Fix PV Power on the Widget not being updated in remote connections
- Add “System sync settings” support included in latest Multi RS firmware
- Add “Switch phases as group” setting
- Add firmware v1.26:
    - With solar only
        - Postpone partial shading scan if the tracker is limited by voltage or power as there is nothing to gain by scanning.
    - MultiRS only
        - Add grid code support for Austria
        - Remove the feed-in restriction of 5kW when using an external AC PV inverter
        - Self consumption from the battery can go to all system loads or only critical loads connected to the ac output if there is an energy meter
        - Only raise the grid lost alarm if the ac input type is set to grid
    - 3 phase configurations and/or parallel configurations only:
        - Fix inverter start-up issue, unit would not start charging if the grid returned when

'not allowed to discharge' or low-SoC was active.
    - Also include changes from v1.25
        - Add settings synchronisation; VictronConnect shows which settings are synchronised if the feature is enabled
        - Add 'Switch phases as group' configuration, allowing configurations like 1 phase in and 3 phase out
        - Various improvements to make the 3-phase system behave as a single device
        - Germany: divide maximum charge power 4.2kW by the number of units if the charge restriction is active (EnWG §14a)

Energy Meter VM-3P75CT

- Add firmware 1.10
    - Add power factor live data
    - Add phase sequence live data
    - Add phase rotation alarm
    - Add EV charger and Heatpump roles
    - Various improvements

MPPT Solar Chargers:

- Add firmware v1.68
    - Remove battery temperature compensation from load output voltage thresholds
- Fix some models do not export TX/RX settings to settings files

EVCS

- Add firmware v2.03
    - Reduced the voltage drop threshold for detecting a connected EV during the CP auto-calibration procedure
    - Fixed an issue with 2s delay before power off in disconnected state
    - Fixed an issue in the CP auto-calibration procedure that caused calibration to occur in a disconnected state
    - Add more detailed info when the product can't be reached via local network for firmware updates
    - Add control on the password length
    - Fix color manual input selection for lightring settings

Lynx Smart BMS & NG:

- Added cell-id for min/max voltage/temp (Bluetooth only)
- Add firmware 1.14
    - Improved State of Charge accuracy
    - Updated float voltage levels
    - Smoother transition to float stage (reduces discharge spikes in ESS systems that feed back into the grid)
    - New default Charged Voltage
    - NG: Synchronization between battery monitor and charge control added to avoid entering the float stage before battery monitor synchronization is complete
    - NG: Fixed the repeated absorption timer broken per v1.08
    - NG: The cell voltage threshold for not-allowed-to-charge contact has been reduced from 3.75V to 3.65V

    - NG: Added cell-ID information for minimum and maximum cell voltages and temperatures
    - NG: Added a data loop test to validate the communication interface with the batteries (no special handling in VictronConnect App or similar is required)
    - NG: Fixed issue with ATC and ATD not being retained when the BMS cable was disconnected
    - NG: Fix occasional issue where, especially systems with many batteries, would not start up and raise Error. #2, No battery found
    - Fixed alarm relay that was not activating for high temperature alarms

Smart & Blue Smart Chargers

- Add firmware v3.65
    - Add button lock feature to all chargers with a button
    - Fix Blue Smart Charger IP65/IP67 rebulking based on voltage instead of current
- Applies to:
    - Smart Charger IP43 120–240V models
    - Impulse-II rev2 hardware models
    - Blue Smart Chargers IP22, IP65 and IP67 models, produced after a hardware change made in production near the end of 2019.

VE.Bus inverter/charger:

- Fix Instant Readout AC out power does not show the sum of all the phases

VE.Bus BMS NG:

- Add support

SolarSense

- Installation peak power is set in Wp instead of kWp to be more precise
- Better description of the “Temperature compensation” parameter
- Add data selection for historical values
- Add total estimated energy yield in a period
- Add graphics for historical values
- Add Long History support & show historical maximums
- Add Instant Readout on remote connections
- Fix Instant Readout total yield
- Fix “Installation peak power” behaviour when set values over 655kWp

Demos

- VE.Bus Inverters
    - Inform that settings requires MK3-USB

v6.19 (Released officially)

** 2025-07-18 **

Download links:

- iOS: App Store

- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store
- Linux AppImage

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Changes

Multi RS:

- Add firmware v1.25:
  - Add 3-phase support for Germany grid code.

GX:

- Fix remote console button is not shown when GUI v2 is the default one

Lynx Shunt VE.Can:

- Fix reverse current setting is shown while product doesn't support this feature

v6.18 (Released officially)

** 2025-06-09 **

Changes

- Fix a problem where the Instant Readout encryption key is truncated on certain platforms or screen resolutions.

Orion Smart:

- Add firmware v1.16:
  - Fix startup issue on 48V output smart models

OrionXS:

- Add “BMS Present” reset button
- Add firmware v1.12:
  - Minimize VHF radio interference.

Multi RS:

- Add PV Inverter (without batteries) ESS mode
- Add firmware v1.24:
  - Fix inverter startup from passthrough to on and startup without a battery.
  - Prevent grid disconnect during a firmware update on a 3-phase system.

SmartShunt & BMV-712:

- Add firmware v4.19:
  - Added setting (76) to reverse the shunt direction (signedness of the Current will swap i.e. postive current becomes negative and vice versa).
  - Support battery capacity up to 32,500 Ah (prior limit was set to 9,999 Ah).

Phoenix & SUN inverter:

- Add firmware v1.37:
  - Add missing high DC ripple voltage / high DC terminal temperature alarm and warning
- Add support for new models

SmartSolar:

- Add Bluetooth firmware v2.53:
  - Add VE.Smart Networking support for SmartSolar 250|60 & 250|70

MPPT Solar Chargers:

- Add firmware v1.67 for some models:
  - Internal improvements for SmartSolar 100/30 model.
  - Improve startup robustness when a running on a synchronized charging network.
  - Improve robustness of 100/50 startup under high solar potential.

Skylla-i:

- Hide AC input current limit setting on models that do not properly support it

v6.17 (Released officially)

** 2025-04-29 **

Changes

- Android: Fix custom name not updating in the product list on some Android versions

OrionXS 1400:

- Add firmware v1.11:
  - Internal improvements
- Fix Orion XS Smart Alternator(24V) preset

v6.16 (Released officially)

** 2025-04-15 **

Changes

- Fix an issue where VictronConnect could freeze for a while when opening a VRM deep link, if the app was not already running.

MPPT RS, Inverter RS:

- Add firmware v1.22:
  - Changes applying to all RS models:
    - Fix Paygo issue
  - Changes applying to all RS models:
    - Fix Paygo issue.
  - Changes applying to the Inverter RS and the Multi RS:
    - History does not log incoming AC power if there is no PV inverter detected.
  - Changes applying to Multi RS only:
    - Add grid codes: Germany single phase, South Africa and Spain Storage Systems without feed-in surplus.
    - Fix issue where the system doesn't work properly when the charge voltage set-point is set to 0.

Multi RS:

- Add firmware v1.23:
  - Fix storing the grid code specific settings in non-volatile memory.
  - Note when upgrading from v1.22: please check the grid settings in VictronConnect, the Grid code reverts back to ‘None’.

VE.Bus Inverter/Charger: * Add firmware v556:

- Fixes instability issues (during PowerAssist/Charge/FeedIn) which became apparent with revision 555.
- Include changes from v555:
  - Improve system stability for Charge and PowerAssist in combination with certain gensets. On all tested gensets, the system now works stable without the need to enable the Weak AC Input setting. (This improvement is available when the selected gridcode is “None” or “Other”)
  - Added support for the German 14a EnWG requirement. Battery charging of the system is limited to 4.2kW when the AUX2 input of the L1 phase master is “closed”.

Orion XS:

- Fix generator shut-down detection can show wrong selected preset
- Remember last selected values for trends
- Fix connection via VE.Direct cable
- Fix some settings are not available via remote connections

Smart Charger IP43:

- Fix connection via VE.Direct cable
- Fix some settings are not available via remote connections

smallBMS NG:

- Fix demo library icon
- Add firmware v1.03
  - Reduced power consumption

v6.15 (Released officially)

** 2025-04-02 **

Changes

- Add Vietnamese translations
- Fix Trends page not remembering last selected trends in some cases.
- Fixed an issue where VictronConnect could sometimes trigger macOS to ask for download new fonts
- Fixed random crashes when a VM-3P75CT is available on the local network

VRM deep links: **(New feature!)**

- Connect to remote products in VictronConnect directly from the VRM devices list by clicking the 'Open in VictronConnect' button. Currently, these buttons are only available at VRM Beta (https://betavrm.victronenergy.com)

MPPT RS:

- Fixed an issue where the 'Charger enabled' toggle did not reflect the correct status in certain situations.
- Add a setting to allow hiding unused MPPT trackers

MultiRS:

- Do not require password when setting a grid code for a first time.
- Various improvements to the NS Log list
- Add a setting to allow hiding unused MPPT trackers
- Include grid code settings when exporting & importing settings files
- Include grid code settings in demo products
- Add support for Austria, Germany and Spain grid codes (not in firmware yet)
- Show ESS settings in demo product

SolarSense:

- Add initial support

smallBMS NG:

- Add initial support

Orion XS:

- Add initial support for Orion XS 1400

Lynx SmartBMS NG:

- Add firmware v1.13
  - Various stability improvements, especially for systems with many Lithium-NG batteries.
  - Improved Lithium-NG battery firmware updates.
  - Fixed invalid value in maximum cell temperature history (NG models only).
  - Fixed issue with Cumulative Ah counter.

    - Fixed issue where Lynx Distributors on the system side could incorrectly raise “blown fuse” warnings while the contactor was open.
    - Includes Lithium-NG battery firmware v1.01

- Disable or hide settings that do not apply to the NG version, such as the number of batteries and battery capacity, which are retrieved automatically from the batteries themselves.

Smart BatteryProtect:

- Add firmware v2.12:
    - Released for 12/24V-100A and 12/24V-220A only
    - Fix an issue where a voltage drop to 9V causes misbehavior, displaying incorrect information on the screen and occasionally disabling the output instead of keeping it enabled during the warning.

Smart Battery Sense:

- Add firmware v1.15:
    - Reduced power consumption compared to firmware v1.14

Lynx Shunt VE.Can :

- Add battery voltage calibration

VM-3P75CT:

- Trigger reconnection when changing roles over a remote connection.

MPPT Solar Chargers:

- Add firmware v1.66 for Smart and BlueSolars 75/10 and 75/15 (from serial number HQ2231 and newer):
    - Fix issue with TX alternate pin feature where, when not selected as “normal communication”, some extra unexpected pulses could be generated.
    - Fix issue with RX alternate pin feature where the functions wouldn't work according to the specs when the RX pin was left floating (not connected).

v6.14 (Released officially)

** 2025-01-27 **

Changes

- Reword NMEA2000 Device Instance setting to VE.Can Device Instance.
- Android: Fix first scan right after the installation of VictronConnect does not show nearby Bluetooth products.
- Update translations
- Add Czech language

Lynx SmartBMS NG:

- Add demo product for 500A & 1000A models

- Add NG batteries balancer firmware update status

VE.Bus Smart dongle:

- Make the firmware v1.20 update optional rather than mandatory. This version was included in VictronConnect v6.13.

v6.13 (Released officially)

** 2025-01-14 **

Download links:

- iOS: App Store
- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store
- Linux AppImage

Notes:

- Android: If you can't open the downloaded file from the downloads list try using a file browser.

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Changes

VE.Bus Smart dongle:

- Add VE.Bus Smart Dongle firmware v1.20
    - Fix AC wrong power readings in secondary mode
        - Introduced in firmware version v1.19, the issue only affects secondary mode (Secondary mode is active when a GX device is connected to the VE.Bus along with the dongle).

v6.12 (Released officially)

** 2024-12-11 **

Changes

- Fix VictronConnect fails to start on Linux. Issue introduced in v6.10

Multi RS:

- Add firmware v1.20
    - Fix connections issues for 3-phase systems when using one of the grid codes Europe, Belgium and Poland.
- Fix firmware updating via local network GX

Orion XS:

- Add firmware v1.06
  - Fix handling of newer serial numbers that could cause conflicts with VE.Smart networking

EVCS:

- Improvements to the firmware updating process

SmartLithium:

- Minor fixes for Instant Readout cell voltage values

v6.11 (Released officially)

** 2024-11-27 **

Download links:

- iOS: App Store
- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store
- Linux AppImage

Notes:

- Android: If you can't open the downloaded file from the downloads list try using a file browser.

Please report bugs and give feedback to these betas via the Disqus comments below. Please note that comments are not public by default, and first go to a moderation queue.

Changes

Multi RS:

- Fix an issue where certain grid settings are protected under the grid code password when they shouldn't be.

EVCS:

- Improvements to the firmware updating process

v6.10 (Released officially)

** 2024-11-21 **

Download links:

Changes

- Add support for QR Quick connect (feature not available for users yet)

- Show profile pictures in the VRM installations list
- Make settings lock feature more visible; a lock icon is shown in the settings page even when lock is not set.
- Various UI fixes and improvements
- Show detailed information if a product is shown as an unknown product in the devices list
- Improve compatibility with Unisoc-based Android devices, such as the Nokia G11 Plus.
- Improve the product discovery troubleshooting page by notifying the user when a known issue is present, such as Bluetooth being disabled or a required permission not being granted.
- Improve trends zoom behavior

GX products:

- Make possible to connect to attached products via LAN
- Add support for security profile
- Do not show the GX in the product info page of attached products
- Show the correct icon for Ekrano GX

EVCS:

- Add firmware updating support
- Add firmware v2.00

MPPT, Inverter, Multi RS:

- Add firmware v1.19:
    - See changelog on https://professional.victronenergy.com

Multi RS:

- Add Grid Code support
- Add sustain voltage settings
- Add ESS Ac Power setpoint setting
- Improve the overview main widget
- Add phase rotation settings
- Show the AC Input connection status in the overview main widget
- Add “Low SOC” alarm
- Move mode setting to the general settings menu.
- Improve “On/Off/Inverter only/Charger only” modes description
- Add PV Inverter ESS mode
- Make possible to disable repeated absorption

Energy Meter:

- Add firmware v1.08:
    - Add line-to-line voltages
    - Add neutral current
    - Add split phase support (L1/L2)
    - Add energy registration method
    - Users can choose between vector (default), arithmetic and absolute
    - Add roles for EV charger, heat pump, water pump and water heater
    - Fix missing messages/responses in VE.Can communication
    - From v1.06:
        - Add LED pulse output to indicate energy flow. Default the LED pulses every 10Wh.

        - Several ethernet related improvements that should help streamlining the firmware update procedure.
        - Update the bootloader to v1.04 to benefit from the same ethernet improvements as mentioned above.
        - Make L1, L2 & L3 instant readout always visible
    - Fix Ethernet state being invalid in VictronConnect
    - On remote connections, improve handling when the meter role or the number of phases is changed is changed.

VE.Bus Inverter/Chargers:

- Make it possible to restore settings after a firmware update
- Various improvements
- Make settings compatible with upcoming firmware versions
- Make system configuration compatible with upcoming firmware versions
- Other improvements

Lynx Smart BMS:

- Fix mode button is sometimes misplaced

BMV-712 & SmartShunt:

- On remote connections, improve handling when the monitor mode or DC meter type is changed.

GlobalLink:

- Add support for new model

Phoenix & Blue Smart Chargers firmware version v3.61:

- Applies to all 230V- as well as all 120-240V Phoenix Smart Charger models
- Applies to all IP22, IP65 and IP67 Blue Smart Chargers produced after a hardware change made in production near the end of 2019. Chargers of the earlier generation can be updated to v3.25 and no further - VictronConnect App will then show a “this the latest version” note. Chargers of more recent hardware generations can be updated to v3.61. There are no plans to make firmware updates available for the earlier generation of chargers.
- Firmware v3.61 change log:
    - Add Instant Readout
    - Fix low temperature Cut-Off (IP22 and IP43)
    - Add synchronized charging to IP43 230V
    - Time for fixed absorption can now be set to 0 on all chargers (disabling absorption)
    - Repeated absorption can now be disabled on all chargers (requires Victron Connect update)
    - Adaptive absorption time can now be set to 30 minutes on all chargers.
    - Tail current can be configured on all chargers
    - Add 30 seconds bluetooth enable option to BSC IP65 6-12V/1.1A since it has no mode button
    - Update PUK entry procedure when 30 seconds BT is configured

Smart Battery Sense:

- Add firmware v1.14
  - Add Settings Lock support

Smart Shunt, BMV-712, Phoenix & SUN Inverter, VE.Direct Smart dongles:

- Add Bluetooth firmware v2.52:
  - Various small VE.Smart Networking fixes
  - Improvements on internal error handling and recovery

VE.Bus Smart Dongle:

- Add firmware v1.19:
  - Improve ADC filter response for the battery voltage measurement
    - In rare cases on some installations the charge voltage seemed to oscillate during absorption.
  - Add support for external transfer switch based installations

v6.09.1 (Released officially)

** 2024-09-24 **

Changes

Phoenix Smart Inverters:

- Fix Bluetooth firmware update problem for a recently shipped batch of Phoenix Smart Inverters. Note that this change unfortunately disables the Settings Lock feature. A new update that re-adds Settings Lock for the Phoenix Smart Inverters is expected soon.

v6.09 (Released officially)

** 2024-09-10 **

Changes

VE.Bus Inverter/Chargers:

- Fix error 122 when updating VE.Bus BMS V2 based systems
- Fix system configuration missing phase selection buttons

SmartShunt:

- Add support for new models

Orion XS:

- Add firmware v1.05 update (mandatory)
  - Improve non-volatile memory management by fixing a bug that could cause memory corruption when flashing the history or settings data. This is yet another improvement on top of what was done previously on v1.04.
  - Fix operation time count when Orion XS is not charging (Off state)

Solar Chargers:

- Add firmware v3.16:
  - Fix bug on synchronize charging over CAN when two or more MPPTs are connected. In some rare situations this could potentially cause the charger to jump absorption.
- Improve behaviour when scrolling 30 day history bar graph

Energy Meter:

- Fix voltage between PE and Neutral is not shown.

v6.08 (Released officially)

** 2024-08-07 **

Changes

Orion XS:

- Add firmware v1.04:
  - Bug fixes
    - Start displaying warning #67 BMS Connection lost. Previous fw version (v1.03) was not displaying the warning, even though the warning was internally activated. While active, the charger will be kept at “Float” state, with a fix 12V output voltage setpoint.
    - Improve non-volatile memory management by fixing a bug that could potentially cause memory corruption when flashing the history or settings data.
  - Improvements
    - Remove auto equalisation support. On previous FW versions, when equalisation was enabled, the charger would perform equalisation every charge cycle, which is not healthy for the battery. Now only the manual equalisation is supported.
    - Allow VE.Smart Networking to be configured over VE.Direct.
- Add error #67

MPPT Solar Chargers:

- Make firmware v1.64 mandatory for the following models
  - SmartSolar Charger MPPT 75/10 (A074)
  - SmartSolar Charger MPPT 75/15 (A075)
  - BlueSolar Charger MPPT 75/10 (A07C)
  - BlueSolar Charger MPPT 75/15 (A07D)
- Add firmware v1.65 for SmartSolar 100/30-12V (A07E)
  - Extend internal improvements made on v1.64 for all SmartSolar 100/30-12V models.

VE.Bus Inverter/Chargers:

- VE.Bus firmware update: Fix error 123 when updating MultiPlus-II 48/3000/35-32
- Add firmware v552

Lynx SmartBMS:

- Add firmware v1.11

    - Fix bug that prevented the device from automatically switching on after a low cell voltage. The Lynx BMS now switches on again when a charge voltage is detected on the system side. This bug was only in the NG versions.
    - Add support for the “Pending” state in parallel mode that indicates on the GX that the BMS is waiting until the battery voltage is within a safe range to connect to the operational battery bank. The voltage displayed indicates the voltage at which it will connect.
    - v1.10:
        - Support for parallel BMS systems, which adds redundancy to a system. Detect other BMSs & optimize behavior for that case - implemented such that in case of no functional CAN-bus communication between the BMSs everything also works. No user setting is required for parallel support. Use in combination with Venus OS v3.40 or later, since that includes the new feature about combining the data into one total “virtual” bank + use that for DVCC. Paralleling is only possible for models with the same current rating. Combining Smart Lithium BMSs and Lithium-NG BMSs is allowed.
        - Add 3 seconds delay to start-up procedure, for all system types, to detect parallel BMSs.
        - Peukert adjusted to 1.02 and charge-efficiency to 99.5% for more accurate SoC calculation.

Phoenix & SUN Inverter:

- Add firmware v1.36
    - Add support for settings lock

v6.07 (Released officially)

** 2024-06-07 **

Download links:

- iOS: App Store (Pending of Apple App Store approval)
- Android
- Windows 10 and higher
- macOS 11 (macOS Big Sur) and higher|App Store (Pending of Apple App Store approval)
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes

Lynx SmartBMS NG:

- Lynx Smart BMS 1000 NG:Add battery details page

v6.06 (Released officially)

** 2024-06-06 **

Changes

- Fix firmware update notification is not cleared after updating the firmware on remote connections.
- Correct the issue where the selection dialog occasionally displays large gaps between options.

MPPT Solar Chargers:

- Add firmware v1.64:
  - Internal improvements for 100/30-12V model.
  - Improve robustness of SmartSolar 75/10 and 75/15 during shutdown and startup.
  - Improve robustness of SmartSolar 100/20 startup under high solar potential.
- Make firmware v3.15 update mandatory for SmartSolar 250/100 rev2

Energy Meter:

- Add firmware v1.06:
  - Add LED pulse output to indicate energy flow. Default the LED pulses every 10Wh.
  - Several ethernet related improvements that should help streamlining the firmware update procedure.
  - Update the bootloader to v1.04 to benefit from the same ethernet improvements as mentioned above.

Lynx SmartBMS NG:

- Fix battery tab show a white empty page on tablets in portrait mode.
- Hide batteries cells details on remote connections, this data is not yet available via VRM.

Phoenix & SUN Inverter:

- Add settings lock exceptions

SmartShunt:

- Add support for SmartShunt 300A model

v6.05 (Released officially)

** 2023-04-25 **

Changes

- Fix Google Play Store reports Android 6 as the minimum Android compatible version instead of Android 8.
- Fix settings files created by VictronConnect v5.xxx do not load on v6.xx
- Fix product id doesn't show for local products in product info page

MPPT chargers:

- Fix settings export/import buttons are not present for some models

v6.04 (Released officially)

** 2024-04-15 **

Download links:

Changes

- Fix Android navigation buttons sometimes overlaps the bottom of the app
- Fix some values are partially drawn off screen
- Fix the app will display a shaded overlay when it disconnects from a product while a dialog box is open.
- Return to the devices list instead of the installations list after a remote firmware update
- Fix an issue where a product may be mistakenly added to the “My Products” list after an unsuccessful connection attempt.

GX products:

- Fix firmware version is not shown when connected via local network

MultiPlus & Quattro:

- Fix an issue that may cause settings files to be saved improperly, resulting in error #9 (Unexpected number of connected products) when attempting to restore settings.
- Add firmware v510

v6.03 (Released officially)

** 2023-03-18 **

Changes

VE.Bus inverter/chargers:

- Fix settings of individual units of a configured parallel of multi phase system can't be accessed

v6.02 (Released officially)

** 2023-03-16 **

Changes

Multi RS:

- Fix passthrough mode is not available for selection

GlobaLink520:

- Fix update feed setting

v6.01 (Released officially)

** 2023-03-14 **

Changes

Android:

- Fix Application Not Responding(ANR) seen on certain conbination of hardware/settings/installed apps. The ANR can happen randomly but trying to start a firmware update always triggers it on affected installations.

v6.00 (Released officially)

** 2024-03-13 **

Changes

New Feature: Settings Lock

- **Installer-Enabled Settings Lock:** Now, installers can set a password to lock settings, ensuring that end-users cannot accidentally modify critical configurations on their systems.
- **Easy Unlocking:** Unlocking the settings is a breeze. VictronConnect remembers all seen passwords and auto unlocks the product while the installer is connected.
    - When you log into VRM, the product passwords are securely stored in VRM and synchronized across all your devices—phones and computers—where you are logged into your VRM account.
- **Firmware Update Required:** Settings Lock feature requires compatible firmware. Firmware updates for the products supporting this feature are included in this VictronConnect version.

Qt Framework Upgrade: Marks a significant milestone as we transition from Qt 5 to Qt 6. This update brings numerous improvements and advantages that enhance your user experience and set the stage for new features in the future.

Minimum OS version requirements:

- Android:
    - Android 8 or higher: (previously Android 5)
        - For older versions VictronConnect v5.106 is available in Victron Energy downloads page.
- iOS:
    - iOS 14 or higher (previously iOS 12)
- Microsoft Windows:
    - Windows 10 or higher. (previously Windows 7)
    - For older versions VictronConnect v5.106 is available in Victron Energy downloads page.
- macOS:
    - macOS Big Sur (11) or newer (previously macOS Sierra (10.12))
- In the settings page, prioritise Bluetooth firmware update available notification.

- On Windows, notify that there is a VictronConnect update and provide a manual update option.
- Fix notifications drawer can partially hide oldest notification in certain circumstancies.
- Retain alarm notifications until the user has read them.
- Demos: Show Bluetooth Enable/Disable for products supporting it.
- Improve information shown when a new file is manually added to the firmware library
- Several UI/UX improvements
- Various internal improvements

Multi RS, Inverter RS && MPPT RS:

- Add firmware v1.16:
  - Check this Victron professional post for detailed changelog.

- Inverter RS & Multi RS:
- Improve alarms behaviour
- Add “Off reasons” button and notifications. This shows an explanation of why the inverter/charger is in off state.
- Add descriptions to the operation modes setting
- Add PV inverter yield to the solar history
- Add “Short circuit” alarm notification.
- Add manual control functionality for the built-in relay.
- Make system configuration available in demo products
- Show each tracker power in the overview page besides with the total PV power. This information was only available in the status page.

- Multi RS:
  - Fix overview power readout when unit is in L2 or L3 on 3P systems
  - Input voltage on demo product
  - Add support for the generator start/stop control using the built-in relay
  - AC Input control: Fix DC condition connection delay

EV Charging Station:

- Add all set of settings that are currently available via the web interface.

BMV-712, BMV-710h & SmartShunt:

- Add firmware v4.16 update:
  - Fix: settings lock key&timestamp are preserved when performing a restore to default.
  - Include all changes from v4.15:
    - Add new feature “Settings lock”.
- Add manual control functionality for the built-in relay. (BMV only)

VE.Direct Smart Dongle:

- Add firmware update v2.50:
  - Add new feature “Settings lock”.
  - Several small VE.Smart Networking improvements.

SmartShunt, BMV-712, SmartSolar and Smart Inverter:

- Add Bluetooth firmware update v2.50:
  - Improve Settings lock feature

    - Several small VE.Smart Networking improvements

Smart Chargers:

- Fix descriptions of errors #14 & #18
- Add relay manual control mode
- Add manual control functionality for the built-in relay. (Only for models with buitl-in relay)

Solar Chargers:

- Add Bluetooth firmware v2.49:
    - Add new feature “Settings lock”.
    - Several small VE.Smart Networking improvements.
- Add firmware v1.63:
    - Add new feature “Settings lock”.
    - Add support to relay manual control
- Add firmware v3.15:
    - Add new feature “Settings lock”.
    - Add support to resetting error 119 by restoring settings to default
    - Reduce change of mis triggering PV Input shutdown errors
- Fix “Lifetime total” & “Since reset” yield does not show in some screen configurations.
- Add manual control functionality for the built-in relay.

Orion Smart:

- Add “Off reasons” button and notifications. This shows an explanation of why the product is in off state.3

VE.Direct Inverter & SUN inverter:

- Add firmware v1.35:
    - Range “ECO mode search interval” extended to 1 hour

Lynx Smart BMS:

- Add distributors to the demo product

Orion XS:

- Fix DC input values don't update on remote connection
- Fix “Bulk” state is shown instead “External control”

VE.Bus Smart Dongle:

- Add firmware v1.18:
    - Fixed MultiPlus-II 12/3000/120-50 120/240V details tab shows large negative current on AC-Out L2 when inverting or with single phase grid connection
    - Add Ve.Bus error code 128 “Connection prevented by failing relay test”

v5.107 (Released officially)

2024-03-16

Changes

Windows only:

- Do not update to v6.xx when running on Windows 10 32-bit

v5.106 (Released officially)

2024-03-13

Changes

Windows only:

- Prevent auto updating to v6.xx updates on Windows 7/8. Latest VictronConnect version is not compatible with these Microsoft Windows versions.

v5.105 (Released officially)

** 2024-02-21 **

Changes

OrionXS:

- Add Orion XS firmware v1.03:
  - Add full support to VE.Smart Networking (remote sense).

v5.104 (Released officially)

** 2024-02-13 **

Changes

- Fix error #R2 when connecting to remote products.

OrionXS:

- Add demo product

Multi RS & MPPT RS:

- Add an option to customize the names of MPPT trackers.

Multi RS:

- Fix overview widget doesn't show AC input power when the unit is set to L2 or L3

Lynx Smart BMS:

- Fix missing settings in demo product

v5.103 (Released officially)

** 2024-01-17 **

Changes

- Update the “where to find the pin code” message shown to the user while connecting via Bluetooth. It now includes instructions to look for the Bluetooth pin code on a label on device.
- Improve stability and speed of firmware updates on iOS
- Fix connection for Android devices using UNISOC T SOC hardware.

OrionXS:

- Add firmware v1.02
  - Change the displayed product name from Smart BuckBoost to Orion XS
  - Fix issue that could cause Error 120.

SUN Inverter:

- Fix ECO search interval setting, it was not shown.

v5.102 (Released officially)

** 2024-01-08 **

Changes

VE.Bus Inverter/Chargers:

- Add firmware v509 for Quattro-II (2651xxx and 2645xxxx)
  - Fixed the issue that with firmware revisions 504-508 a Quattro-II system could end up in a situation that it refuses to connect to the grid for no apparent reason.
- Fix import settings does not work for some new models.

Multi RS & Inverter RS:

- Fix AC input current limit and relay high voltage value settings are not included when exporting settings to a file.
- Fix number of decimals for PV current for units with more than one MPPT tracker

v5.101 (Released officially)

** 2023-12-15 **

Download links:

- iOS: App Store(Pending of App Store approval)
- Android

- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store (Pending of App Store approval)
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes

VE.Bus Inverter/Chargers:

- Fix Quattro-II firmware v508 files.

Orion XS:

- Use the correct name for this range of products

Victron Energy Meter:

- Add firmware v1.05:
  - Add position setting

Inverter RS & Multi RS:

- Show consumption in 30-Day history

v5.100 (Released officially)

** 2023-12-12 **

Changes

VE.Bus Inverter/Chargers:

- Add VE.Bus Inverter/Charger firmware v508

Phoenix inverter:

- Support enlarged ECO search interval on new firmwares, now 3600s, previously 360s. This requires a new firmware not included in VictronConnect yet.

SmartLithium:

- Fix instant readout cell voltages do not update requiring to trigger a scan to get updated values

v5.99 (Released officially)

** 2023-11-14 **

Download links:

Changes

- Fix battery monitor first use setup can't be completed (issue introduced in v5.98)

v5.98 (Released officially)

** 2023-11-13 **

Changes

Multi RS, Inverter RS & MPPT RS:

- Add firmware v1.15 (mandatory upon connection)
  - Update fan and dimming temperature profiles, enable the fan earlier for the MPPT circuit.

VE.Bus Inverter/Chargers:

- Fix firmware update when updating systems with more than 4 units
- Fix firmware update when updating MultiPlus-II systems with multiple hardware ids

- Add firmware v507 for some MultiPlus-II models
  - Fix noisy/erroneous fan driving for
    - MultiPlus-II 24/3000/70-32 (PMP242305010); HQ2229 Up to and including HQ2337
    - MultiPlus-II 48/3000/35-32 (PMP482305010); HQ2226 Up to and including HQ2339
    - MultiPlus-II 48/5000/70-50 (PMP482505010); HQ2225 Up to and including HQ2317
  - Not all units within those serial number range are affected. For further details, see change log on Victron Professional.

Victron Energy Meter:

- Add initial support

Smart BuckBoost:

- Add initial support

SmartLithium:

- Improve Instant Readout when low & high cells are out of range

v5.97 (Released officially)

** 2023-10-04 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes

SmartShunt / BMV-712:

- Add Bluetooth firmware v2.46:
  - Fix for occasional erroneous battery temperature broadcasts on VE.Smart networking, causing Smart Solars (on the same network) to stop charging.
  - Add support for VE.Smart Networking for new IP65 Rev2 Smartshunts.
  - Fix for SOC trend scaling error. In some situations a wrong SOC value could end up in the stored trend for SOC (only the stored trend; the SOC value itself was not affected).

v5.96 (Released officially)

** 2023-09-25 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes

- Fix issues with firmware updates on the recently released Apple iOS 17.

VE.Bus Smart Dongle:

- Add VE.Bus Smart Dongle firmware v1.17
  - Improve sustain state reporting

SmartSolar:

- Fix settings import/export for SmartSolar 75/15 & SmartSolar 75/10 rev3 models

v5.95 (Released officially)

** 2023-08-30 **

Changes

- Fix Bluetooth connection on some Android Phone models
- Fix VRM remote connection on Windows; You may need to re-authenticate in VRM.

v5.94 (Released officially)

** 2023-08-29 **

Changes

- Fix Bluetooth connection with GX, EVCS and GlobalLink 520 products.

v5.93 (Released officially)

** 2023-08-25 **

Changes

- Fix VRM login on Windows
- Fix issues with iPad Pro 2016 WiFi
- Show Bluetooth Instant Readout key and product MAC address in Product Info page
- Improve service report content
- Fix remove button in firmware list for user added files
- Android: Do not ask for permission to open non supported USB devices.

VE.Bus Inverter/Charger:

- Add new MultiPlus models
- Fix sustain voltage is not saved into settings files

MultiRS:

- Allow “0” as minimum number of inverters to start on three phase systems
- Do not show parallel system configuration option. Parallel configuration is not supported yet.

v5.92 (Released officially)

** 2023-08-09 **

Changes

- Fix issue with iPad Pro 2016 WiFi

SmartSolar:

- Add firmware v3.14 for SmartSolar 250/100 rev2 model. (mandatory):
    - Improve the PV short relay reset mechanism

VE.Bus Smart Dongle:

- Add firmware v1.16:
    - Add sustain state to instant readout
    - Add support for solar and wind priority feature
    - Add support for “Solar and wind priority” controls

VE.Bus Inverter/Charger:

- Add firmware v506
    - Add support for “Solar and wind priority” settings and controls

- Fix product info page does not always notify that there is a firmware update available

Smart BMS:

- Add firmware v1.09:
  - Improved power-up sequence for System+ port
  - Added support for HW rev2
    - Added System+ LED control
    - Added Alternator LED control
    - Disallowed product release in Test mode, when HW rev2 is not set
    - Set minimum App version to v1.09 for HW rev2 products

v5.91 (Released officially)

** 2023-06-05 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes

- Add a feature to lock VictronConnect on to a demo product. Useful for exhibitions and training.

Multi RS & Inverter RS:

- Add firmware v1.12:
  - Changes applying to Inverter RS only:
    - Add support for AC output parallel and 3-phase operation.
  - Changes applying to Inverter RS and Multi RS only:
    - Fix false-positive over-charge protection (error 29).
    - Fix false-positive PV riso protection (errors 41 and 42).
    - Remember the operating mode (on/off/inverter only) during a firmware update. Instead of always switching On after a firmware update.
    - Fix PV panel power/current readout in case the MPPT converter is off, there can still be current present if the panel voltage is too high.
  - Changes applying to Multi RS only:
    - Add pass-through mode, this closes the AC input relay while the inverter/charger remains off, the MPPT charger remains active. Settable in VictronConnect.
    - Add 'External control' support, this allows for self implementation of a control loop by controlling the AC power set-point dynamically.
    - Improve inverter PLL to prevent frequency jumps when the AC input is connected or disconnected, this could trigger a PV inverter disconnect.
    - Ignore conditional AC disconnect in sustain mode and inverter shutdown due to allow-to-discharge signal.

    - Changes applying to Multi RS dual-MPPT (PMR482602020) only:
        - Fix relay test sequence.
        - Remove PE-Neutral monitoring.

VE.Bus Inverter/Charger:

- Fix firmware version reports that it is up to date when it isn't.
- Add new models

VE.Bus Smart Dongle:

- Add support for Quattro-II 2x120V
- Fixed spurious AC input frequency values during inverting.
- With some Multi models occasionally spurious AC input frequency values where published during the inverting state.
- Fixed missing values updates with instant readout enabled.
- While connected, with instant readout enabled, not all values where properly updated on changes.

v5.90 (Released officially)

** 2023-05-02 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes

- Instant readout now notifies warnings, alarms and errors
- Improve stored trends time-stamp accuracy of data stored before a reboot
- Improve service log mechanism to include more useful data in service reports
- VC-R: Fix a bug that makes VE.Bus Inverter/Chargers to be listed when the GX product is running Venus v3.0. These products are not supported by VC-R.
- Fix Bluetooth problems with Nokia G11, Samsung Tab A8 and probably other Android models.
- Fix settings with radio buttons can report a wrong value after when pressing the cancel button. This issue didn’t affect the actual value of the setting.

Multi RS:

- Improve and add extra information to ESS mode selection
- Hide “Monitor PE to Neutral voltage” setting for models not supporting it
- Add new aux input modes
- Trends: Fix AC out power does not report data

VE.Bus Inverter/Chargers:

- Support firmware updates using multiple vff files. Some models depending on production date report different product ids and the proper firmware file is required for each product id.
- Add firmware v503 for some models:
    - See firmware details here
- VE.Bus BMSv2 false detection when previously connected to a system with a BMS
- Add missing VE.Bus errors
- Improve recovery from a BMSv2 failed firmware update including both BMS & Inverter simultaneous firmware update failure and some other corner cases.

VE.Bus Smart Dongle:

- Fix default PIN code warning when dongle is connected to a Multi/Quattro
- Fix VE.Bus settings load and restore for the “DC input low pre-alarm” setting:
    - In case the DC input low-shutdown value was modified the “DC input low pre-alarm” could contain the wrong value.

Smart Battery Protect:

- Add firmware v2.11:
    - Added support for Instant Readout
    - VictronConnect can now show the most relevant Smart BatteryProtect data in the product list page without having to stablish a connection
    - Improved “Disabled SBP will now try to pull output to 0V” behavior (introduced in v2.06)
    - To prevent possible mosfet failures

SmartBMS & SmartBMS CL:

- Add firmware v1.08:
    - Added support for Instant Readout
        - VictronConnect can now show the most relevant Smart BMS Current Limiter data in the product list page without having to establish a connection
    - Removed BMS cable error detection
        - The detection could give false cable error detections when more than 1 battery was connected. This could lead to a lock-up, because charging and discharging is not allowed anymore in that case. The detection has been removed because it is impossible to detect a faulty BMS cable when there is more than one battery connected.
- Added support for Random PIN codes
- Made sure that allow charge/discharge outputs (&LEDs) stay active at end of FW update
- Several internal improvements

Smart BMS 12-200 only:

- Added Alternator-Only as remote-off option making it possible, to disable only Alternator when Remote OFF.
- Disabling both Alternator and System+ port can still be selected as remote-off option.
- Added charge current limiting for the charge current coming from the System+ port. Previously, the configured limit was used for the Alternator charging only.

EVCS:

- Add demo products

VE.Direct Smart Dongle, SmartSolar & SmartInverter:

- Add Bluetooth firmware v2.44:
  - Fix VE.Smart networking and custom name not being cleared when “Restore default” for product is executed. Now, the only things not cleared by a restore default, on purpose, are Bluetooth pincode and bluetooth bonding.
  - Fix: erratic values in battery temperature trend data (only applicable for SmartSolar).
  - Fix: short interruption in the battery temperature trend data when charging stops (only applicable for SmartSolar).
  - Some small VE.Smart Networking improvements

SmartLithium:

- Add firmware v1.31:
  - Add support for hardware revision 2

Solar Chargers:

- Fix wrong error #26 description

v5.83 (Released officially)

** 2023-04-05 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes

- Add Ukrainian translation

SmartShunt:

- Add firmware v4.14:
  - Fix for lost firmware. In rare situations the SmartShunt would require a firmware update after a cold boot (powerup). When this happened, the functionality of the Smartshunt was fully restored by completing the update. There was no impact on the History and the Settings i.e both remained unaffected by this issue.
  - Fix for failing updates. In some rare situations the update was aborted due to an unexpected internal hardware event.

BMV-712/710H:

- Add firmware v4.13:
  - Fix for incorrect calculated state of charge (SOC) when no temperature sensor is

connected while the auxiliary input is set to “Temperature”. This issue was found in v4.12 and could in extreme cases result in a SOC that is always 1%.
    - BMV-710: Since latest released firmware for this model was v4.05 , with the v4.13 update the BMV-710H gets all the fixes and features from intermediate versions like DC monitor mode and retained SOC on reset.

Orion Smart:

- Add firmware v1.13: (Update is only mandatory for models affected by the issue described below)
    - Fix issue on some isolated 24V output models that don’t startup on low temperatures.

v5.82 (Released officially)

** 2023-02-15 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes

RS products:

- Add RS firmware v1.11:
    - Changes applying to all RS products (Inverter RS, Multi RS and MPPT RS):
        - Report warnings and alarms on the internal display.
        - Remove upper limit from the battery tail current setting. When pairing multiple chargers together this setting can be larger than the units' own maximum current value.
    - Changes applying to Inverter RS and Multi RS only:
        - Improve PV isolation measurement and PV residual current detection test sequence to avoid false positive detections.
        - PV residual current sensor self-test failure now reports as error code #202.
        - It is now possible to switch off the backlight of the internal display using the latest VictronConnect app.
        - Fix low SOC alarm, no longer using the discharge floor and internal non-editable 90% level to generate the alarm. The low SOC alarm only uses the low SOC shutdown settings.
        - Fix low battery voltage alarm when powering up the unit by connecting the battery.
        - Report the inverter power as Watts instead of VA and add inverter current on the built-in display.
    - Changes applying to Multi RS only:
        - Add support for generators:
            - The inverter has an increased tolerance for irregularities on the ac input like

fast frequency changes or voltage changes. For robust generator control enable 'moderate generator load changes' and switch off the 'UPS function'.
- Add 'moderate generator load changes' setting, enabling this lets the inverter absorb sudden load changes and slowly transfer them to the generator. This prevents speed variations in the generator.

- Add 'UPS function', this realizes a faster transfer to inverter mode when the mains stops. This function is enabled by default.
- Reduce charge current at higher battery voltages and/or lower AC input voltages. At 230V, the maximum charge current at 57.6V is now approximately 88A unless derated due to ambient/internal temperature. The maximum achievable charge current was higher, approximately 95A under the same conditions.
- Update Battery Life state if the minimum discharge soc setting is lowered externally during operation.
- Fix low SOC shutdown behavior, it did not take the AC input into account.
- Add conditional AC input disconnect feature.
- Clear PE-Neutral error condition when disconnecting from the grid, this allows for easy mains plug reversal to fix this issue.
- BMS discharge current limit 0 shuts down the unit when it operates in inverter (island) mode, any other value resumes normal operation.
- Setting the on/off mode to 'Inverter only' now disconnects from the grid, in line with the VE.Bus Inverter/chargers.
- Change behavior of the battery state 'sustain' (=battery discharged). In ESS mode 'optimized' the unit switches to trickle charge mode where previously it would charge the battery at full power from the grid.
- Improve mains plug disconnect detection reliability for systems that are not allowed to feed energy to the grid. This is realized by always drawing a small current from the grid, so we can reliably detect grid absence.
- Improve remove on/off pass-through when using the SmallBMS. Before the system would also flag that the battery is discharged.

Multi RS:

- Fix AC input current scaling

VE.Bus Inverter/Chargers:

- Add firmware v502

EVCS:

- Improve notifications related to not-configured modes
- Make possible to disable WiFi network scanning
- Fix misbehaviour of notifications panel

Battery monitor:

- Keep SOC on reset: Move “Keep SOC” to the top of options list
- Add BMV-712 rev2 to settings definitions. Enables save/load settings files.
- Add retained soc capability to BMV & SmartShunt demos

SmartLithium:

- Set minimum ATC temperature to 0ºC

v5.81 (Released officially)

** 2023-01-18 **

Changes

SmartShunt & BMV-712:

- Add Bluetooth firmware v2.43:
  - Adds new “Keep SOC on reset” feature. (!) Selectable in battery settings.
  - Fix (rather rare) bug that could cause faulty temperatures to be transmitted in a VE.Smart network. This bug only affected BMVs and SmartShunts without the (optional) temperature sensor. These “zombie” temperature broadcasts caused SmartSolars to stop charging for the rest of the day, to restart only the next day. Note that this bug was very rare to occur.

Orion Smart:

- Add firmware v1.12:
  - Add instant readout

SmartSolar & BlueSolar:

- Update shipped firmware to v3.13 (was v3.11):
  - Show error 2, Battery voltage too high, immediately when powering up. Instead of only once starting to charge. This allows the installer to see an issue, by for example recognising odd blinking LEDs, easily and before connecting the PV.
  - Split error 38 into error 80 to 87. The error description can be found at https://www.victronenergy.com/live/mppt-error-codes.
  - Reduce possibility of mis triggering the PV short protection.
  - Add feature to reset the PV short for SmartSolar VE.Can 250/100 (PV Short relay was introduced per HQ2150)

VE.Bus Inverter/Chargers:

- Add firmware v501

SmartLithium:

- Add support for new models

v5.80 (Released officially)

** 2022-12-14 **

Changes

- No longer require the connected device to be updated to the latest firmware in order to be able to see and modify its settings. Minimum firmware versions (for accessibg the settings) for a few main product lines now are, and will remain to be:
  - MPPT Solar Chargers: v1.59 / v3.10

    - BMV-712 and SmartShunt: v4.11
    - BMV-700 and BMV-702: v3.11
    - Orion Smart series: v1.10
    - Blue Smart Chargers IP22: v3.21 & v3.42(rev2)
    - Blue Smart Chargers IP65: v3.25
    - Blue Smart Chargers IP65 (6V/12V): v3.42
    - Blue Smart Chargers IP67: v3.21 & v3.25(rev2)
    - Lynx Smart BMS: v1.05
    - Multis and Quattros: no minimum version
- Fix alarms drawer opens full size when connecting to a product with an active alarm
- Add Polish and Japanese translations
- Improve UX on product info when already at latest version

Electric Vehicle Charging Station (EVCS):

- Add initial support via Bluetooth. Requires a new firmware version that is not publicly available yet.

Multi RS:

- Changes that require a new firmware that is not publicly available:
    - Add UPS function setting
    - Add “Moderate generator load changes” setting
    - Split the “minimuim inverters to operate” functionality in two settings
- Fix inconsistency on how frequency is shown for AC Out 2
- Use correct AC out power when AC IN relay is open
- Show AC currents
- Use grid layout for live data items
- Add new errors
- Remove “External control” ESS mode. This mode is not available yet.
- Warn before updating that the inverter will switch off during a firmware update and explain how to keep AC loads powered
- Hide ESS menu from demo product

MPPT/Inverter/Multi RS:

- Allow NMEA2000 instance number change
- Add option to reset BMS control

VE.Bus Inverter/Chargers:

- Add firmware v500. (optional)
    - Add a setting to disable VSense
- Add instant readout functionality
- Implement BMS v2 firmware update mechanism
- Add BMSv2 firmware v113 (optional)

VE.Bus Smart dongle:

- Add firmware v1.13: (optional)
    - Add Support for instant readout
    - Improve number of values shown in secondary mode. Secondary mode now shows AC input an output voltages, currents, frequencies and power values.

- Add instant readout functionality

Lynx SmartBMS:

- Fix alarm notifications keeps popping up while alarm is active.
- Add firmware v1.06:
    - Increase reserve capacity: the capacity that remains in the battery when the system shuts itself down to prevent further discharge. This reserve capacity defines the time (number of weeks) that is available before at the latest having to recharge the battery to prevent a too deep discharge. Two changes:
    - When the Lynx Smart BMS (LSB) auto-shuts down to prevent further discharge (ATD), due to a low cell event, the main contactor and the GX device (aux output) are shutdown with a delay. This delay was 2 hours, which is now reduced to 5 minutes. The reason behind the 5 minutes, as opposed to doing that immediately, is to allow for sending the shutdown reason to the VRM remote monitoring portal. The related low cell voltage threshold is configured in the batteries.
    - When the LSB auto-shuts down due to the low SOC protection, the LSB used to shut down the loads (ATD contact) but keep the main contactor as well as GX device powered. Until a low cell voltage event occurred. Now, it uses the same mechanism as on a low cell voltage event: upon reaching the SOC threshold, the loads are shut down (ATD contact) immediately. And after a 5 minute delay the GX device (AUX output) and main contactor are shut down as well. Unless it measures a charge current of 500mA or higher. This ensures the lowest possible power consumption for the BMS of only 0.3mA for all system voltages.The related SOC threshold is configurable in the BMS.
    - Improved wakeup behavior when the system was shut down due to low battery voltage, low cell voltage or low SoC. With previous versions, the system wakes up when the charging voltage is 0.5V higher than the battery voltage. Now that we turn OFF the BMS earlier and the solar chargers lose their BMS connection, the output voltage of the solar chargers will be 12V (on 12V systems). To be sure the BMS turns ON at sunrise, we have added a new wake-up reason: if the charging voltage is above 11.7V. This is 23.4V for 24V systems and 46.8V for 48V systems.
    - Two seconds delay added to (not-)allowed-to-discharge to prevent unexpected load disconnect at glitches on the Smart Lithium BMS signals.

SmartLithium:

- Fix “E-SL1 Overvoltage alarm” should be “E-SL1 Balancer failure”

SmartShunt:

- Add specific icons for IP65 models

MPPT Solar Chargers:

- Remove RX port function settings in demo products of models that doesn't support them.
- Add firmware v3.11 & v1.61: (optional)
    - Improve battery voltage auto-detect corner cases, by completely eliminating the chance of a charger running with an auto-detect pending after the next restart or power cycle. Three changes: (1) in case the charger can’t detect the battery voltage, because no battery voltage is present at power-up on the battery terminals, select 12V. (2) after doing a restore settings to default, perform an auto-detect after 10 seconds. The 10 seconds is to allow a distributor to power down the product in order to leave the product

as if its fresh from the factory. (3) Models without load-output would do an auto-detect only if there is PV present. This is changed: auto-detect happens always within 10 seconds after power-up, unconditionally and same for all models.
    - SmartSolar Control display: no longer show the battery voltage setting on the display at first power-up, to simplify the process and interaction with auto-detect. The setting is still available in the settings menu.
    - Add support to relay remote control mode, which allows the user to manually select the relay state.

- Add a button to reset the PV short relay:
    - Only for SmartSolar 250/100 VE.Can
    - Requires a new firmware that is not officially available yet.

BMV7-12 & SmartShunt:

- Add firmware v4.12: (optional)
    - Prepare for Keep SOC on reset feature

SmartBatterySense:

- Fix firmware update availability is not reported for SmartBatterySense rev2 models

v5.77 (Released officially)

** 2022-11-02 **

Changes

VE.Bus Inverter/Charger:

- Add firmware v499 for Quattro 48/10000/140-2×100 & Quattro 48/8000/110-2×100 (optional)

Multi RS:

- Fix inconsistency on how frequency is shown for AC Out 2

MPPT solar chargers:

- Remove RX port function settings in demo products for models that doesn't support them.

v5.76 (Released officially)

** 2022-10-24 **

Changes

- Fix various demo products

VE.Bus Inverter/Charger:

- Add support for VE.Bus inverter/charger firmware v498

- Include VE.Bus inverter/charger firmware v498 (optional update)

v5.75 (Released officially)

** 2022-10-13 **

Changes

- Fix Cerbo-S GX is recognised as a different product

v5.74 (Released officially)

** 2022-09-26 **

Changes

- Fix internal products database keeps adding duplicated entries under certain conditions
- Fix in range products serial numbers are shown as “undefined” in VE.Smart networking config page.
- Notify when there is a firmware update available for the Bluetooth interfaces
- Android: Internal improvements
- Fix fetching trends data on reconnect
- Enable PIN code reset via PUK to all internal dongles
- Reword “broadcast data” to “instant readout”

MPPT Solar Chargers:

- Require confirmation when user changes the battery voltage
- Make sure to exit from voltage auto detection when user selects battery voltage
- Fix history CSV export can fail in certain situations

SmartSolar, BMV & SmartShunt:

- Set Bluetooth firmware v2.41 as optional update

Phoenix Inverter:

- Fix load widget shows “0” instead of load state

SUN Inverter:

- Fix history CSV export

VE.Bust Smart Dongle:

- Fix connected Multi/Quattro is not added to “My devices”

Orion Smart:

- Reword “Charger enabled” to “Output enabled”

SUN Inverter:

- Enable settings file export/import
- Fix “Low battery shut down” and “Low battery restart & alarm” settings

BMV-712 & SmartShunt:

- Add option to retain SOC after a power cycle. This requires a new firmware that will be available soon.
- Fix current reading in demo produts

v5.73 (Released officially)

** 2022-08-18 **

Changes

- Remove tail current maximum value limitation as it is not high enough for big batteries banks. Now the user can set any value and the product will clip it to boundaries if necessary. Applies to BlueSolar, SmartSolar, Multi/Inverter/MPPT RS, Smart Lynx BMS and SUN Inverter.
- Always show the broadcast data expand button, this allows to toggle the description text when all the data fits in one line.

GX products:

- Fix the GX device is not added to “My devices” when using Bluetooth.

VE.Direct Smart dongle:

- Add firmware v2.41: (update mandatory upon connection)
    - Add Bluetooth live data advertisement support

Smart Phoenix Inverter:

- Add bluetooth firmware v2.41: (update mandatory upon connection)
    - Add Bluetooth live data advertisement support

Lynx Smart BMS:

- Add a disable/enable switch to the discharge floor setting.
- Add description for the discharge floor setting
- Add description for the batteries in parallel setting
- Reword battery capacity/voltage to Battery bank capacity/voltage.

Orion Smart:

- Add firmware v1.10: (optional update)
    - Fix charge state report when charger is limited by the input voltage right after starting up. This caused the charger to report as being disabled in the VictronConnect app, even if it was already charging the battery. This bug was harmless for the charger, battery, or loads, only the report was wrong.

BMV & SmartShunt:

- Show the first use setup only when charged voltage has not been configured previously. This avoids the charged voltage to be silently changed when the first use setup is completed.

SmartSolar, BMV & SmartShunt:

- Mark Bluetooth firmware v2.41 as mandatory update

v5.72 (Released officially)

** 2022-07-25 **

Changes

SmartLithium:

- Add firmware v1.28: (optional for firmware v1.24, v1.25 and v1.26, mandatory otherwise)
  - This fixes the problem found in v1.27. It is **strongly** advised to install this update when running firmware v1.27

v5.71 (Released officially)

** 2022-07-18 **

Changes

Smart Lithium:

- Stop further roll out of firmware v1.27 by putting the firmware carried in VictronConnect back to v1.25. Note that any batteries already updated to v1.27 cannot be rolled back. This roll out stop is due to a bug. See VictronConnect v5.72 for the solution, it adds Smart Lithium firmware v1.28, as optional for when battery is running v1.24, v1.25 and v1.26. And mandatory otherwise.

v5.70 (Released officially)

** 2022-07-13 **

Changes

- Support Android 12 new Bluetooth permissions. This allows VictronConnect to scan for nearby Victron Bluetooth products without having to request location permissions. Only applies to Android 12 pho
- Add Danish & Russian translations
- Improve Venus to xlsx converter: Conversion can now cope with partially corrupted VRM log files
- Several internal improvements
- New feature: Sort local products list by name and group user own products. To add a product to

the “own” group VictronConnect has to connect to it at least once.

- New stored trends feature:
  - Trends data is kept stored in the product for up to 46 days for most products, except the Smart Battery Sense, there its 181 days.
  - SmartSolar, BMV-712 and SmartShunt:
    - SmartSolar support trends for Batt. Voltage, Current and Temperature, as well as Load output current, PV voltage and PV current.
    - BMV-712 and SmartShunt support trends for Battery voltage, Current, State of Charger % as well as the Aux input (battery temp, or midpoint deviation, or starter battery voltage).
    - Interval configuration is equal for above products, and in detail is:
    - 2m at 1s interval (RAM only)
    - 2h at 30s interval
    - 1d at 5m interval
    - 45d at 30m interval
  - Smart Battery Sense trends:
    - Support trends for Battery voltage and Battery temperature.
    - 2m at 1s interval (RAM only)
    - 2h at 30s interval
    - 1d at 5m interval
    - 180d at 30m interval

- New broadcast data functionality:
  - VictronConnect can now show the most relevant data of Smart products in the product list page without having to stablish connection with the product.
  - Supported by SmartSolar, Smart BMV, SmartShunt, Smart Battery Sense, Lynx Smart BMS, Smart Lithium and Inverter/Multi/MPPT RS. Firmware versions included in this VictronConenct release are required.
  - Broadcast data is disabled by default, can be enabled in product info page.
  - Broadcast data is encrypted.
  - Broadcast data has better range than regular connection.
  - VE.Direct and VRM remote connected devices does also benefit of this new feature; in this case no new firmware is needed.

VE.Can products:

- Enable VictronConnect-remote for some VE.Can products:
  - This feature requires Venus OS v2.90 which is not available yet. First v2.90 beta will be released in Sept 2022 or later.
  - Enable VE.Can firmware updates
  - Supported products:
    - Lynx Smart BMS
    - Inverter RS
    - Multi RS
    - MPPT RS
    - Blue/Smart Solar VE.Can MPPTs – Tr and MC4 models
    - Lynx Shunt VE.Can
    - Skylla-i
    - Skylla-IP44/IP65
  - Unsupported products:
    - BlueSolar VE.Can MPPT 150/70 - end of life

    - BlueSolar VE.Can MPPT 150/85 - end of life
    - Lynx Ion
    - Lynx Ion + Shunt
    - Lynx Ion BMS 150A, 400A, 600A, 1000A – Already supported via Bluetooth

Lynx Smart BMS settings:

- Improve how the distributors and fuses are presented on screen
- Improve the configuration of fuse names including an option to disable unused fuses.
- Improve history page
- Improve demo mode
- Add a button to toggle between On/Off/Standby modes. This is an improvement to the previous toggle switch
- Reword the hibernate state to off
- Add SOC Synchronize button to the settings menu
- Add a setting to manually set the current state-of-charge
- Show the date and time for the last 4 errors
- Add “Why the device is off” pop-up. This shows the reason and advices to recover from the off state
- Add low soc alarm and warning
- Add low soc warning and discharge floor settings
- Add firmware v1.05: (optional update)
    - Various improvements in On/Off/Standby handling.
    - Simplify and improve various automatic protection levels:
    - For details, see changelog in https://professional.victronenergy.com/

VE.Can MPPT Solar Chargers:

- Add firmware v3.10: (optional update)
    - Improve overall yield on systems that have ripple over the battery voltage (improvement done on v3.08)
    - Fix issue on the GX Device regarding the yesterday history
    - Support for live data advertisement

Smart Battery Sense:

- Add firmware v1.13 (optional update)
    - Small trend configuration change (Note: trend data stored using versions <v1.12 will be erased when updating to v1.12)
    - Several trend stability fixes
    - Improved trend download time
    - Clearing a single trend is not supported anymore (only clearing all trends at once is supported for now)
    - Bootloader will be updated to v1.09

SmartSolar, BMV-712 & SmartShunt internal Bluetooth dongle:

- Add Bluetooth firmware v2.41 (optional update)
    - Support for broadcast data Advertisement
    - Small trend configuration change (Note: trend data stored using versions <v2.38 will be erased when updating to v2.38)
    - Several trend stability fixes

    - Improved trend download time
    - Clearing a single trend is not supported anymore (only clearing all trends at once is supported for now)
    - Fixed issue that blocked using the puk while bonding info was still valid
    - Bootloader will be updated to v1.16

Orion Smart:

- Update embedded firmware from v1.06 to v1.09. Includes various improvements and enable/disable option for BLE. See change log on Victron Professional for details.

SmartLithium:

- Add firmware v1.27: (optional update)
    - Support for runtime data advertisement. Disabled by default, to enable it go to Settings → Product Info and enable “Bluetooth live data advertisement”

Phoenix Smart Charger (120-240V models) :

- Add warning 31 (input voltage out of range)
- Add option to disable repeated absorption
- Add manual recondition button

SmartShunt & BMV-712:

- Implement first use setup:
    - Battery capacity and aux input mode needs to be configure in order to get full access to settings
    - Note that this was further improved upon in v5.73: see that change log for details.
- Fix current reading has wrong sign when connected via VC-Remote and DC energy meter mode is enabled

GlobalLink:

- Initial support for firmware v2.06 (not released yet)
    - Custom name for ve.direct and digial inputs
    - Read data from Ruuvi sensors
    - Configure ruuvi sensors to listen to
    - Support custommer's simCard
    - Configure simCard PIN code and APN
    - Support read Victron products data via Bluetooth. This feature needs to be supported by the products via a future firmware update.

VE.Bus Smart dongle:

- Add firmware v1.12:
    - Add support for VE.Bus BMS V2 (enables on/off/charger-only selection in combination with VE.Bus BMS V2)
    - Add “External control” status when BOL frames are being detected

Lynx Smart Shunt:

- Add initial support

Multi RS and Inverter RS:

- Add phase L2 & L3 AC values reading (Firmware under development)
- Add “Minimum nr of inverters” setting (Firmware under development)
- Improve how the NS protection log is registered in the service report

Inverter RS, Multi RS & MPPT RS: Multi RS and Inverter RS:

- Add firmware v1.10:
  - Reset all protections when using the power switch, remote off input or device mode off command so the device can be restarted remotely.
  - Repeated absorption interval parameter can now be set to 0 to disable this functionality as required by some batteries.
  - Allow fan operation during and immediately after firmware updates, to prevent a temperature warning/alarm when updating a unit that is running hot.
  - Add under-voltage lockout on the DC bus voltage so the internal supply keeps working under all conditions.
- Changes applying to Inverter RS and Multi RS only:
  - Shutdown the inverter when the connection to the BMS is lost after 3 minutes.
  - Improve AC coupled PV inverter control mechanism in combination with managed batteries.
  - All inverter AC voltages report RMS values.
  - Improve inverter protection reporting if the cause is an empty battery.
  - Increase detection time for error Performance enhancements #201, switching on a huge load could cause a false positive trigger.
  - Improve inverter dynamic cut-off behavior by using the actual battery current when available from a BMS or BMV.
  - Fix device sleep/wakeup behavior when dynamic cut-off is enabled or when using the low SOC shutdown function.
- Changes applying to Multi RS only:
  - Fix charge sequence, charging from the AC input is not possible if the AC input cannot be used e.g. due to an AUX input rule.
  - Fix repeated absorption interval behavior in ESS mode, it tries to charge from solar power first, if this is not successful it will charge from the grid after a day.
  - Speed-up AC input relay open sequence by switching off both poles of the contactor coil at the same time.
  - Add bulk protection mechanism when charging from the grid.
  - Fix ESS control flag “DisableCharge”.
  - Fix inverter protections: an active inverter alarm caused the unit to shut-down.
  - Fix AC incoming solar power on the display when connected to the grid.
- Bluetooth interface:
  - Add support for live data advertisement.
- NMEA2000/VE.CAN:
  - Update PGN 126464 Received and transmit group function content.

v5.61 (Released officially)

** 2022-07-01 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store (Pending of Apple review)
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Please report bugs and give feedback to these betas via the Disqus comments below. Please note that comments are not public by default, and first go to a moderation queue.

Changes

- Add firmware v1.33 for Smart Phoenix Inverter 48V 5000VA: (update mandatory upon connection)
    - Reduced maximum fan speed for 48V 5000VA inverters at high battery voltage

v5.60 (Released officially)

** 2022-05-25 **

Changes

VE.Bus Inverter/Charger:

- Add MultiPlus and Quattro firmware v497

v5.59 (Released officially)

** 2022-04-04 **

Changes

RS Inverters and Solar chargers:

- Add firmware v1.09: (optional update)
    - Changes applying to all RS products (Inverter RS, Multi RS and MPPT RS):
        - New derating function: the maximum output current is reduced on a linear basis from full current at 60V to 5A at 62V. Note that this relates to the output voltage at the battery terminals, and not to the voltage the battery itself, measured with voltage sense.
        - The maximum configurable charge voltage will be reduced from 62V to 60V. The actual charge voltage can be higher, due to temperature compensation as well as voltage drop over the cables in combination with Voltage sense. The reason to reduce the maximum configurable charge voltage is that specifying it at 62V is misleading, in combination with the derating. The equalization voltage upper limit is still 62V.
        - Fix user relay battery low/high voltage settings range for VictronConnect.
        - Make over-charge protection error #29 less trigger happy when using external voltage control.

    - Changes applying to Inverter RS and Multi RS only:
        - Suppress frequency information when there is no voltage present, on the GX device you could still see 50Hz or 60Hz while the AC voltage was absent.
        - Battery over-current error #18 now reports as an overload alarm condition.
    - Changes applying to Multi RS only:
        - Prevent battery current overload at low battery voltage when the inverter load jumps.
        - Fix Grid disconnect log: conditions causing the inverter to switch off are now also logged.
        - Increase PE-N voltage limit to 42V when using the AC input, the PE-N voltage limit for the internal relay remains at 8V. The higher PE-N voltage limit is also used during the relay test sequence. The 42V limit is chosen as this voltage is still considered to be safe to touch.
        - Various fixes in ESS modes that are still in beta test stage.
    - NMEA2000/VE.CAN:
        - Fix writing/changing the installation description using Unicode characters (PGN 126998).
        - Fix query acknowledge response code on a write-only register.

- Add a setting to disable partial shading detection in MPPT algorithm. This setting must be kept enabled for optimal performance.
- Use equalization voltage upper limit provided by the product.

Orion Smart:

- Remove option to disable float: Orion Smart doesn't support disabling float, doing it will lead to unexpected behaviour once the absorption stage ends.

BMV & SmartShunt:

- Fix remaining time somethimes shows “nanm” value

v5.58 (Released officially)

** 2022-03-16 **

Download links:

Changes

- Fix batteries preset temperature compensation setting is always displayed in Celsius even when Fahrenheit is selected

VE.Bus Inverter/Chargers:

- Add new models

MPPT Solar Chargers:

- Fix MPPT RS 450/200 max current limit setting

Phoenix Inverter:

- Add Phoenix Inverter firmware update v1.30 for 48V 250VA models (mandatory update upon connection)

v5.57 (Released officially)

** 2022-03-04 **

Changes

- Fix some typos

VE.Bus Inverter/Chargers:

- Add new models

SmartLithium:

- Fix displayed value and input range for temperature offset setting when using Fahrenheit as temperature unit.

MPPT Solar Chargers:

- Fix some demo models show RX port settings menu while the product doesn't support alternative RX port functions.

SmartShunt:

- Add support for future models

Phoenix Inverter:

- Add support for upcoming new models

v5.56 (Released officially)

** 2022-02-08 **

Changes

- Android: Fix a bug in Qt framework that makes Android 12 trigger a warning reporting that VictonConnect pasted clipboard content.

MPPT RS:

- Add firmware v1.08: (optional update)
  - Fix false-positive error #201 the detection levels were too strict and could be triggered falsely during MPPT start-up in the morning and MPPT shutdown in the evening.
  - Fix false-positive error #35 in the MPPT when the irradiance jumps to a higher level (on a partly cloudy day).
  - Fix false-positive error #27 in the battery short circuit detection.
  - Change fan high temperature set-point from 65°C to 57°C.

    - Fix battery state reporting as “external control” in case DVCC current limiting is active.
    - Make it easier to retry a failed update attempt. VictronConnect will now automatically prompt to update the unit in case the previous attempt got interrupted.

Inverter RS:

- Add firmware v1.08: (optional update)
    - Fix false-positive error #201 the detection levels were too strict and could be triggered falsely during MPPT start-up in the morning and MPPT shutdown in the evening.
    - Fix false-positive error #35 in the MPPT when the irradiance jumps to a higher level (on a partly cloudy day).
    - Fix false-positive error #27 in the battery short circuit detection.
    - Change fan high temperature set-point from 65°C to 57°C.
    - Fix battery state reporting as “external control” in case DVCC current limiting is active.
    - Make it easier to retry a failed update attempt. VictronConnect will now automatically prompt to update the unit in case the previous attempt got interrupted.
    - Fix remote discharge current limit behavior in inverter mode.

Multi RS:

- Add firmware v1.08: (optional update)
    - Fix false-positive error #201 the detection levels were too strict and could be triggered falsely during MPPT start-up in the morning and MPPT shutdown in the evening.
    - Fix false-positive error #35 in the MPPT when the irradiance jumps to a higher level (on a partly cloudy day).
    - Fix false-positive error #27 in the battery short circuit detection.
    - Change fan high temperature set-point from 65°C to 57°C.
    - Fix battery state reporting as “external control” in case DVCC current limiting is active.
    - Make it easier to retry a failed update attempt. VictronConnect will now automatically prompt to update the unit in case the previous attempt got interrupted.
    - Fix remote discharge current limit behavior in inverter mode.
    - Fix start-up from the ac input without battery (e.g. manually disconnected or contactor open)

Lynx Smart BMS:

- Add firmware v1.04: (optional update)
    - Fix in current measurement. Current readings between 80A and 120A could deviate for certain loads with high peak currents.
    - Support for Venus OS Lynx Distributor fuse alarms. Distributor alarms are no longer displayed as error code in Venus OS but displayed as readable alarm messages. This requires a Venus OS update to v2.81 or higher. Older Venus OS versions will display old style alarm/error codes.
    - Support for future Lynx Distributors.

v5.55 (Released officially)

** 2022-02-01 **

- Fixes crashes when connecting to a Bluetooth product on macOS.

v5.55 was released for macOS only, other platforms remain on v5.54.

v5.54 (Released officially)

** 2022-01-31 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Please report bugs and give feedback to these betas via the Disqus comments below. Please note that comments are not public by default, and first go to a moderation queue.

Changes

- Add support for recently released MultiPlus-II GX and and EasySolar-II GX hardware revision

Known issues

- macOS 12.2 aka Monterey: VictronConnect crashes. This issue is expected to be fixed real soon, ie within days.
- macOS 12.2 aka Monterey: VictronConnect is unable to pair to new Victron products via Bluetooth. Meaning that it is only possible to connect to products that were paired with before updating the macbook to Monterey. We're working on that, but so far its proving to be a real challenge. More details in this thread on community.

v5.53 (Released officially)

** 2022-01-24 **

Changes

General:

- iOS: VRM login is now done via an in-app web view instead of the default web browser.
- Fix issues introducing large numbers when Switzerland locale is selected.

Multi RS:

- Add firmware version v1.07 for Multi RS as a mandatory update.
- Add an option to synchronise the battery SOC to 100%
- Add Shutdown on SOC setting
- Add setting to spefify the source of AC Input
- Add setting to enable/disble the motoring of PE to Neutral voltage
- Add Aux input settings

SmartSolar, BMV-712 & SmartShunt:

- Set Bluetooth firmware v2.37 as a mandatory update

MPPT RS:

- Fix demo product

v5.52 (Released officially)

** 2022-01-03 **

Changes

- Improve compatibility with macOS Monterey
  - Fix application crashes when connecting to a Bluetooth product
  - Note that Bluetooth pairing is broken in macOS Monterey: connection can only be stablished with products that were already paired before updating the Apple device to Monterey. We're working on that, with Apple, but there is no solution on the horizon yet.

Multi RS:

- Show AC input in the overview

Lynx Smart BMS:

- Fix “Unknown error” is wrongly displayed

Smart Battery Sense:

- Add firmware v1.10 (optional update)
  - Not possible to connect to Smart Battery Sense anymore is fixed. It fixes the Smart Battery Sense remaining greyed out in the VictronConnect “Device list” after disconnecting and not able to be connected anymore, until the device itself was powercycled (i.e. wires disconnected to force a reset).
  - Using more accurate timing for storing trend values. This will improve timing accuracy of the trend graph presented by VictronConnect.
  - VE.Smart Network settings are also reset when doing “Reset to defaults”
  - Note: trend data stored using versions <v1.10 will be erased when updating to v1.10
  - Bootloader will be updated to v1.08

SmartSolar, BMV-712 & SmartShunt:

- Add Bluetooth firmware v2.37 (optional update)
  - SmartShunt: experimental GATT veregservice extended with support for AUX input vegs (StarterVoltage, MidpointVoltage&Deviation, Temperature)
  - Using more accurate timing for storing trend values. This will improve timing accuracy of the trend graph presented by VictronConnect.
  - Storing trend data is stopped during an update of attached device (only when updating via Bluetooth).
  - Note: trend data stored using versions <v2.37 will be erased when updating to v2.37
  - Fix for not updating the VE.Smart Network range list. As a result the range list, after initial

presentation, would freeze.
    - SmartSolar: allowing faster switch to new T-Sense source when the currently selected T-Sense source stops broadcasting in the VE.Smart Network.
    - Not possible to connect to device anymore is fixed. It fixes the device remaining greyed out in the VictronConnect “Device list” after disconnecting and not able to be connected anymore, until the device itself was powercycled (i.e. wires disconnected to force a reset).
    - Bootloader will be updated to v1.15

Known issues:

- Bluetooth pairing is broken in macOS Monterey: connection can only be stablished with products that were already paired before updating the Apple device to Monterey. We're working on that, with Apple, but there is no solution on the horizon yet.

v5.51 (Released officially)

** 2021-11-23 **

Changes

Lynx Smart BMS:

- Add firmware v1.03 (Optional update):
    - A new charging cycle is started when the battery voltages are below 12V/24V/48V (3V per cell) or when a cell undervoltage is detected. This is in addition to the SoC threshold.
    - A new charging cycle is started after a firmware update.
    - Fixes restore to factory defaults for BLE settings. BLE settings could not be restored in previous versions.
    - Fix in pgn127506 not showing consumed Ah's. In previous versions the battery capacity was shown.
    - Fix in BMS temperature warning. The GX device did not display a warning at high BMS temperatures. High temperatures can be the result of dissipation by high currents or a high ambient temperature that can damage the Lynx Smart BMS.
    - Removes Load Disconnect message that was displayed in VictronConnect when the unit was put into hibernate.
    - Improved high current detection. The high current warning/alarm was not correctly activated under all conditions. A warning is activated if the current exceeds 600A for 30seconds and an alarm is activated after 5 minutes. Then the loads or chargers are turned off depending on the direction of the current.
    - Chargers and loads will turn back on after 2 minutes.
    - Activate alarm relay at high current warning and alarm.
    - Automatic scaling of the charge voltage parameter when the system voltage is changed. This to prevent a wrong setting of the charge voltage.
    - Error codes changed #116 for Lost Calibration and #119 for Invalid Settings.
    - Fix issue where custom device name was not saved properly when the battery was suddenly disconnected.
    - BMS cable error detection removed. The detection could give false cable error detections when more than 1 battery was connected. This could lead to a lock-up because charging and discharging is not allowed. The detection has been removed because it is impossible to detect a faulty BMS cable when there is more than one battery connected

Phoenix Smart IP43 Charger 120-240V:

- Add firmware 3.50:
  - Initial firmware release

v5.50 (Released officially)

** 2021-11-17 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

Changes

VE.Bus Inverter/Chargers:

- Add firmware v490:
  - Add VE.Bus BMS detection and autoconfigure mechanism
- Add option to remove VE.Bus BMS configuration
- Add low battery temperature cut-off setting for Lithium batteries
- Improve the settings write and read progress notification

MultiRS:

- Add ESS settings menu

Smart Battery Protect:

- Fix shut down voltage can be set higher than the restart voltage in demo product.

v5.49 (Released officially)

** 2021-10-29 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

Changes

VE.Bus Inverter/Chargers:

- Increase config level to enable settings on new firmware v489 (firmware not included)

v5.48 (Released officially)

** 2021-10-07 **

Changes

- Fix demo products show “This is latest version!” although version number is not shown
- Hide status in the VE.Smart networking page during the setup process, it can be confusing.
- Fix crash when a GX device on local lan is detected multiple times. This can happen when a GX device is connected to LAN via ethernet and Wi-Fi simultaniously.

Blue Smart Charger:

- Add firmware v3.42 for Blue Smart IP22 Chargers REV2 (Optional update):
  - Only for models with production date week 24 of 2020 (serial number HQ2024nnnnn and newer).
  - Fix temperature cut-off not always working; issue introduced in v3.40
  - Fix discrepancy between charge cycle history state time and the actual time
- Add firmware v3.41 for BSC IP65XS 6/12V:
  - Remove low temperature battery settings as it doesn't apply to the BSC IP65XS 6/12V-1.1A model

BMV-712 & SmartShunt:

- Add firmware v4.08 (optional update)
  - For non-bmv monitor modes the current and power are inverted to match installation and visual feedback. A positive current is defined as current flowing outward from a source and inward into a load.
  - For non-bmv monitor modes the bmv charging history items are disabled and kWhOut and kWhIn are renamed to EnergyOut and EnergyIn.
  - Water Heater is added as a (load) option for Monitor Mode.
- Show GATT switch only when connected via Bluetooth
- Mark GATT as experimental feature
- Fix “Altenator” typo

VE.Can MPPT Solar Chargers:

- Add firmware v3.07: (optional update)
  - Fix bug when using the internal temperature to estimate ambient temperature. Now ambient temperature estimation saturates on 49C.
  - Fix bug of disabling temperature compensation when battery temperature was above 50C.

MPPT Solar Chargers:

- Add firmware v1.59: (optional update)
  - Fix bug introduced on v1.58 that caused the MPPT to reduce yield when PV array is close to and battery voltage.
  - Fix bug when using the internal temperature to estimate ambient temperature. Now

ambient temperature estimation saturates on 49C.
    - Fix bug of disabling temperature compensation when battery temperature was above 50C.
    - Apply same PV Short Protection improvements (errors 38 and 39) already used on the 250V models (safety improvement - introduced on v1.58).
    - Reduce maximum charger output voltage to 65V (introduced on v1.58).
    - Add error 40 to detect when PV short functionality does not work (safety improvement - introduced on v1.58).
- Fix some demo models do not show StreetLight settings menu

MPPT RS:

- Add firmware v1.05: (optional update)
    - Add TEXT protocol on the ve.direct interface (Inverter RS).
    - Add internal DC voltage measurement safeguard. In case the measurement is not ok the unit stops working, showing error code 201. This prevents over-charging a battery or damage to the internal circuitry.
    - Fix MPPT start-up sequence: bench testing the MPPT using a power supply could damage the internal circuitry (using firmware v1.04).
    - Fix 30-day MPPT history readout.
    - Fix bug when disabling temperature compensation. It was not fully disabled when battery temperature was above 50°C.
    - Fix bug for DVCC’s limit charge current when having only one charger connected on the VE.CAN bus.
    - Improve control loop stability of the built-in MPPT.
- Add DC input resistance readout
- Rename imput mode from BMS to 2-Wire BMS
- Do not not warn about remote mode not in set to 2-Wire BMS when selecting Lithium. A VE.Can BMS can be used instead.
- Do not automatically switch remote imput mode to 2-Wire BMS when Lithium preset is selected from VictronConnect presets library. Remote mode will change if the MPPT built-in “Lithium 2-Wire BMS” is selected.

Inverter RS:

- Add firmware v1.05: (optional update)
    - Add TEXT protocol on the ve.direct interface (Inverter RS).
    - Add internal DC voltage measurement safeguard. In case the measurement is not ok the unit stops working, showing error code 201. This prevents over-charging a battery or damage to the internal circuitry.
    - Fix MPPT start-up sequence: bench testing the MPPT using a power supply could damage the internal circuitry (using firmware v1.04).
    - Fix 30-day MPPT history readout.
    - Fix bug when disabling temperature compensation. It was not fully disabled when battery temperature was above 50°C.
    - Fix bug for DVCC’s limit charge current when having only one charger connected on the VE.CAN bus.
    - Improve control loop stability of the built-in MPPT.
    - Fix internal charger group id (PIN482600000 Inverter RS without built-in MPPT).
- Add DC ripple voltage readout

MPPT Control:

- Add firmware v1.03 (mandatory update upon connection)
    - Solve MPPT Control getting stuck in “CONNECTING”
    - Make the communication more robust
    - Add support for new MPPTs
    - Fix that when autolock is set to false, it would still lock 1 more time.
    - Fix display of MPPT software version

VE.Bus Inverter/Charger:

- Add firmware v487

v5.47 (Released officially)

** 2021-08-13 **

Changes

MPPT Solar Chargers:

- Fix temperature cut-off keeps showing as enabled after toggling the disable switch. Temperature cut-off is disabled by default. Bug was introduced in v5.46 two weeks ago, and is only noticeable when enabling the cut-off(disabled by default) and then trying to disable it again.

v5.46 (Released officially)

** 2021-07-29**

Changes

- Add support for BlueSolar MPPT VE.Can 150/100 Rev2

v5.45 (Released officially)

** 2021-07-19 **

Changes

- Fix GX products LAN/WiFi discovery on iOS and improve it on rest of platforms

Lynx Smart BMS:

- Add firmware v1.02: (mandatory update upon connection)
    - Improve control for alternators, by (1) ensuring that the delay between opening the ATC contact, and subsequently opening the main contactor (i.e. disconnecting the batteries from the system) is at least 2 seconds in all situations. And (b) adding an “Alternator ATC control” mode for the programmable relay. With that addition, it has two modes: Alarm (default) and Alternator ATC control. For systems with alternators, set this mode and wire the alternator control to the user relay. Do not use the normal ATC contact for controlling

an alternator. The advantage of this special mode is that it will only engage the alternator when the battery bank is connected to the system.
    - Added contactor, user relay and ATC/ATD status to NMEA2000 switch bank status PGN.
    - A low battery warning is given 30s before a not-allowed-to-charge signal for batteries that do not support pre-alarm.
    - Improved CVL control. In case of an overvoltage, CVL quickly forces the chargers off by lowering the charging voltage. Then, the voltage is slowly increased to the battery voltage.
    - Added ATC/ATD-failure error. This error occurs if the BMS has to open the contactor because ATC/ATD cannot reduce the charge/discharge currents. By naming that ATC/ATD-failure, it is more clear to the user that there is a problem in the wiring of his system.
    - The wording “Pre-alarm” is replaced by “Low cell voltage warning”.
    - Loads remain on for 30s after disconnecting the M8 BMS cable. A new “BMS cable alarm” together with a “load will disconnect warning” is added to warn the user that the system will shut down after 30 seconds in case the cable is not reconnected in time.
    - Added an emergency power-up feature, to start the Lynx Smart BMS after it has shut itself down in hibernate. What is hibernate? It’s a shutdown mode that limits permanent damage to the batteries as much as it can. In more detail, the LSB will shut itself down into hibernate when it measures an extremely low battery voltage (V < 10V, meaning < 2.5V per cell). ATC contact is opened (since keeping it closed draws current from the battery), Aux port and thus GX devices are shutdown and so forth, which also prevents any chargers from charging again. In the old situation, the only way to get out of that was by adding an external charger, i.e. one not controlled via ATC, and charging the battery to over 12.8V (= 3.2V per cell). Now, this new feature allows a restart via the remote on/off input: once in hibernate, the LSB can be restarted by switching the device off for 5 seconds with the remote and then on again.
    - Fix in SoC calculation. This solves the problem where SoC could go to 0% while the battery was fully charged; in some cases this caused a longer absorption time (CVL = 14.2V) than necessary.
    - Added CAN support for Wakespeed WS500 controller.
    - Instead of only lowering the CVL, now also CCL is set to 0A if charging is not allowed (cell overvoltage or low cell temp). Together with Venus OS v2.72, this improves operation in ESS.
    - Several internal improvements.

VE.Bus Smart Dongle:

- Add firmware to v1.11: (mandatory update upon connection)
    - Fixed constant connection reset bug, introduced in V1.10, between dongle and inverter on MultiPlus/Quattro firmware versions before xxxx460
    - Fixed MultiPlus/Quattro status briefly indicated FAULT immediately after firmware update or power cycle
    - Add dongle status feedback during initialization and mode switch between secondary and primary mode.

SmartLithium:

- Add firmware v1.25 (optional update)

VE.Bus Inverter/Chargers:

- Add firmware v485 (optional update)

MultiPlus-II GX:

- Show the proper icon in the devices list when listing the GX part of the product.

BMV-712 & SmartShunt:

- Show power instead of voltage in main widget when configured as DC monitor

v5.44 (Released officially)

** 2021-07-01 **

Changes

VE.Bus Smart Dongle:

- Rollback firmware to v1.09: (mandatory update upon connection)
    - Firmware v1.10 included in previous VictronConnect release has an issue that constatly resets the connection between the dongle and the inverter. This issue is only present when the MultiPlus or Quattro is running a relatively old firmware version.

VE.Bus Inverter/Charger (connected with MK3-USB):

- Fix connection/disconnection loop, This issue is only present when the MultiPlus or Quattro is running a relatively old firmware version.

v5.43 (Released officially)

** 2021-06-24 **

- Fixes landscape layout on Android tablets.

v5.43 was released for Android only, other platforms remain on v5.42.

v5.42 (Released officially)

** 2021-06-23 **

Changes

- Various internal VRM improvements
- Add Turkish language
- Improve translations
- Stop animations while not visible. This has an impact on Inverter RS firmware updating time on Windows which is now improved.
- Open links to manuals in VC selected language whenever available.
- Fix an issue on Android phones that makes that the toolbar is not properly drawn on Android phones. This issue is caused because Android provides wrong display metrics. So far, this issue has only been observer on phones with a 21:9 aspect ratio screen.

- Fix some Android system configuration changes can make VictronConnect crash and show a white screen.

Blue Smart Charger:

- Add firmware for future IP65 6V/12V model (mandatory installation upon connection):
    - First official release
- Add re-bulk method setting (IP22 REV2 only)
- Allow full current range on IP22 REV2 models (IP22 REV2 only)
- Fixed demo mode for build-in battery types
- Added explanation to recondition voltage setting
- Fix bulk time unit in CSV history export
- Add firmware v3.40 for rev2 models: (Optional update)
    - Update for Blue Smart IP22 Chargers REV2 only; starting production date week 24 of 2020 (serial number HQ2024nnnnn and newer). The hardware revision printed on the the product label should be “hw rev 02” or higher.
    - Support for VE.Smart networking
        - Blink status LEDs briefly once every 4 seconds to indicate VE.Smart networking is active
        - Added support for synchronized charging, allowing to parallel multiple chargers and synchronize their charge algorithms. Compatible with SmartSolar chargers, where the Blue Smart charger will become the charge master.
            - The PV power of all solar chargers is totalized by the charge master and broadcasted into the network to be displayed in VictronConnect when connected to a solar charger.
            - The battery idle voltage at sunrise, needed for aborption time calculation, is taken from the solar charge master upon master take-over. This value is continued to be broadcasted into the network for the solar chargers, to be able to continue charging if the Blue Smart Chargers are disconnected from the network.
            - Manual equalisation from the solar charger settings menu in VictronConnect will be delegated to all devices in the network by the charge master.
            - Enforce re-bulk voltage method, to prevent premature re-bulking when only the charge master is providing the full current. This setting is only enforced when the charge master has detected other chargers in the network and will continue to use the user selected method is case of stand-alone mode. The enforced setting is volatile, meaning that when the charger is restarted it will revert back to the last value the user has selected.
        - Added support for VSense; to be used for cable loss compsensation for individual network nodes
        - Added support for TSense; to be used for temperature compensation and low battery temperature cut*off, required for lithium batteries.
        - Added support for ICharge; when available, the total charge current of all chargers on the network will be used for the tail current.
        - Added support for ISense; when available, the battery current will be used for the tail current. This value is prioritized over the ICharge value. Requires a BMV or SmartShunt.
        - VE.Smart networking settings will be reset upon a “Reset to defaults” in VictronConnect.
    - Added low battery temperature cut-off
        - Requires VE.Smart networking temperature sensor, e.g. Smart Battery Sense or

SmartShunt
        - When pressing the `Why is my charger off?` button in VictronConnect it will state that the charger is off due to a low battery temperature.
        - Because the charger cannot be totally switched off, the setpoints are set to lowest value possible, i.e. 12.8V and 25% * Inominal for a 12V unit.
        - Note for Victron Smart Lithium batteries, above feature is not relevant. Since then the BMS will disable the charge when the batteries are below 5°C, and also in case of cell over voltage. More clearly: its not necessary to buy a Smart Battery Sense to make sure a Phoenix Smart Charger stops charging a Victron Smart Lithium Battery below 5°C.
    - Add tail current functionality
        - When the charge current is below the threshold for 1 minute, the absorption stage is ended and the charger will switch to float/storage.
    - Add re-bulk method based on voltage; this method can be selected using the “Re-bulk method” setting in VictronConnect
        - When the charge current is below the threshold for 1 minute, the absorption stage is ended and the charger will switch to float/storage. Note that the re-bulk current setting is ignored when this method is selected.
        - The default re-bulk behavior remains unchanged, to be able to use the product as mobile charger.
    - Allow 0% recondition current
        - This fixes an issue with the VictronConnect lithium preset
        - Setting it to 0% skips the recondition stage, if enabled
    - The charge current is now adjustable over the full range, from 25*100% * Inominal
    - The recondition current is now configurable from 0-50% (0=disabled)
    - Improved temperature compensation
        - Compensate down to -20°C for bulk and absorption, instead of only 6°C. During float and storage, the compensation is only down to 6°C, as per best practises: to charge a very cold battery, increase the charge voltage; but not to “float” a battery. With this change the temperature compensation works the same as our Solar Chargers as well as Multi and Quattro inverter/chargers.
    - Add hardware check for internal temperature sensor
        - In case malfunction, the temperature derating and compensation works incorrectly
        - An error 23 will be issued in case of sensor malfunction; this is not auto-recoverable and requires a power cycle of the unit. If the error persists, the unit is broken.
    - Allow absorption time less than 1 hour (community request)
        - When adaptive charging is selected, the minimum absorption time of 30 minute is still honored. When a fixed absorption time is selected, it is possible to disable the entire absorption stage.
    - Improve bluetooth connectability with VictronConnect
- Show hardware revision for IP22 demo products:
    - Rev2 models have different capabilities than the Rev1 ones and thus different settings

Phoenix Smart Charger:

- Move charger on/off switch onle level up to the main settings page
- Add firmware v3.38: (Optional update)
    - Update for Phoenix Smart IP43 Chargers Rev1 24/16 (1+1) and 24/16 (3) only
    - Increase minimum charge current from 10% to 25% due to hardware restrictions
        - Fixed issue that charge current can get stuck at ~1.5A; regression introduced in v3.31

SmartLithium:

- Add firmware v1.24: (mandatory installation upon connection)
  - Balancer status indicator showing the state of imbalance between the cells in VictronConnect. It shows the current balancer status and indicates whether it is necessary to rebalance the cells.
  - Added a counter to show the time since last full charge.
  - Support for reset command so a user can manually reset the controller in case of issues as it is not possible for a user to power cycle the battery.
  - Time since last full balancing indicator. This indicates the time since the battery was fully charged and balanced. It is recommended to fully charge the battery at least once a month.
  - Extension of charger disconnect depending on peak cell voltage. This to give the balancer more time to balance the high cell before charging is turned on again. In some systems, there is a delay between the charger disconnect signal and the actual stopping of the charger. This may cause higher cell voltages and can get worse when the charger is turned back on too soon, resulting in a new overvoltage alarm. Therefore a delay of 1-20 minutes is added depending on the peak cell voltage. During this delay, the balancing process continues. This reduces the number of overvoltage alarms and protects the cells against excessive high voltages.

VE.Bus Inverter/Chargers:

- Add support for MultiPlus-II 2x120V split phase models
- Show L2 information for MultiPlus-II 2x120V split phase models
- Fix values can freeze when swithing between apps while connected to a Multi. (Android only)
- Add latest firmware v482, v484 for MultiPlus-II 2x120V:
  - Changes to comply to new French and Austrian grid codes.
  - Improved BF failure detection mechanism.

VE.Bus Smart Dongle

- Add firmware v1.10: (mandatory installation upon connection)
  - Fix switchover is sometimes shown in secondary mode
  - Add support for MultiPlus-II 2x120V split phase models
  - Bootloader: Always reset bootloader after every update attempt
- Limit low cell voltage prealarm minimum value to 2.85V. Firmware doesn't allow setting lowe values.

Solar Chargers:

- Add firmware v1.57 for BlueSolar & SmartSolar 100-50 models:(mandatory installation upon connection)
  - Fix issue that could occur on some units that leads to a wrong measurement of all analog signals (i.e. measuring higher battery voltage than real) after a cold start (restart after battery and PV were disconnected from the charger).

Multi RS Solar:

- Add initial support

Inverter RS & MPPT RS:

- Add support for Inverter RS models without MPPT
- Rename Li-ion built-in preset to LiFePO4 2-wire BMS
- Add firmware v1.04:
    - Features:
        - Further increase operational temperature range so the unit can be used up to 65°C ambient temperature.
        - Derate the MPPT charge power if needed to keep the inverter operational at higher temperatures (Inverter RS).
        - Add support for discharge current and voltage limit to remotely switch off the inverter, this enables future integration with managed batteries using a Venus GX device (Inverter RS).
        - Panel isolation / residual current detection issues only stops the inverter, the inverter restarts automatically once these issues are resolved.
        - Add internal energy counters for data logging to our VRM site (Inverter RS).
        - Change/Reset the pincode for the Bluetooth connection is now supported over a wired connection.
    - Bugfixes:
        - Fix error 35 (over-power): Speed-up MPPT voltage control to avoid a battery voltage overshoot in case the battery is disconnected during charging or PV power jump while the unit is charging.
        - Fix error 27 (short circuit): Improve start-up at low battery voltages e.g. when a contactor connects the battery.
        - Fix start-up on shorted battery terminals to make the unit short-circuit proof.
        - Fix internal supply start-up (applies to Inverter RS units produced before 2020 week 30).
        - Fix error 14 (battery temperature low) and error 120 (voltage reference) when disconnecting the battery.
        - Make the over-voltage protection less trigger happy, also do not report error 53 (inverter internal dc voltage too low) if this protection is activated.
        - Residual panel current detection implementation updated according NEN-IEC 62109-2:2011, the previous implementation was stricter than required.
        - Fix user relay setting on the MPPT RS models.
        - Fix 30-day history on systems that only use an external AC coupled PV inverter.
        - BMS missing condition uses a voltage set-point based on the battery settings (float/storage).
        - Disable internal state-of-charge mechanism in case it is managed externally.
        - Disable voltage alarms on the GX Device (MPPT RS)

Phoenix Inverter:

- Add firmware v1.27 for some 120V models (optional update):
    - User controlled ACout voltage is reduced to 100V, was 110V. (For recent produced models)

- Add firmware v1.25 for Smart Phoenix Inverters 1600/2000/3000VA - 230Vac: (Optional update)
- Reduced power when AC output is off and device is in hibernation mode
- Fix for saved history data issue

- Add firmware v1.24 for new 800-1200VA 230V VE.Direct Inverters models: (Optional update)
    - Improved small load detection in Eco mode
    - Fix for saved history data issue

Lynx Smart BMS:

- Add firmware v1.01 (mandatory installation upon connection):
  - Improved battery monitor calculations. This also solves the problem where the SoC counter suddenly stops at very low currents with large battery banks.
  - Fixes the issue where CVL is always set to storage voltage in 24V and 48V systems.
  - Fixes the issue where BLE could not be enabled with GX devices.
  - Contactor status added to display the switch status correctly in GX devices.
  - Number of parallel battery strings setting added for better behavior of the balancing program with parallel connected batteries.

* Add number of parallel batteries setting * Correct some of displayed error numbers

BMV-712 & SmartShunt:

- Add firmware v4.07 (optional installation):
  - Added monitor mode. Setting can be configured via settings menu (item 72 in BMV) or via VictronConnect. When a non-bmv mode is selected all charging related functionality will be disabled (consumed energy, SOC, charged cycles etc) and this also applies for the history items.
  - Changed default current threshold for SmartShunt 1000A/50mV and 2000A/50mV to 200mA and 400mA respectively (applicable when restoring to default).
- Add Bluetooth firmware v2.30 for SmartBMV/SmartShunt (mandatory installation upon connection):
  - VE.Smart Networking disabled during update of device. This fixes the error message that the update failed (the update itself was successful but the verification could not be accomplished, hence the error message).
- Add monitor mode setting available in Misc settings page.
- Limit low SOC relay clear setting to a max value of 99%, 100% is not allowed by firmware.
- Fix low SOC relay setting range slider is partially hidden when Dutch and French languages are selected.

v5.41 (Released officially)

** 2021-04-26 **

Changes

SmartShunt & BMV battery monitors:

- Fix zero current calibration data is copied across settings files. This prevents copying incorrect calibration data to other units, for example when using a master setting file to batch configure multiple units.
- Improve the warning text shown when triggering a zero current calibration

GlobaLink 520:

- Show an informative warning when connection from an Android phone.

Smart Battery Sense:

- Update product icon to the latest design

v5.40 (Released officially)

** 2021-04-20 **

Changes

* Fix SmartLithium and Orion Smart demo products doesn't open.

MPPT Solar Chargers:

- Add firmware v1.56: (optional, mandatory installation only for some 150/35 & 150/45 models)
  - Improve battery life algorithm by not allowing the voltage offset to decrease too fast to zero during a cloudy day.
  - Change total input power data handling to allow report when charger is off.
  - Improve fixing load output introduced on v1.54. There were still some rare cases that the load output could briefly turn off. This latest version should fix that.
  - Fix overcurrent fast software detection on the SmartSolar 150/35. That caused the charger to get “stuck” on a low power output which was only reset when the charger stopped charging.

VE.Bus Inverter/Charger:

- Add new models to the products database.

v5.39 (Released officially)

** 2021-04-12 **

Smart Battery Protect:

- Add firmware v2.08 (mandatory installation upon connection)
  - Added PROG option for PIN reset (‘P’)
  - Disabled SBP will now try to pull output voltage to 0V
  - Thus providing reliable Phoenix Inverter REMOTE disconnect
  - Several internal improvements
- Warn that load output is disabled for a short period of time during the firmware update

Smart BMS 12/200:

- Add support for the new Smart BMS
- Add firmware v1.06 (mandatory installation upon connection)
- Fix fuse type is not selected warning is shown while in the firmware update page

Smart BMS CL 12-100:

- Add firmware v1.06 (mandatory installation upon connection)
- Fix fuse type is not selected warning is shown while in the firmware update page

Blue Smart Charger:

- Add firmware v3.25 for some of the IP22, IP65 & IP67 models (mandatory installation upon connection)
- Add support for future models

IMPULSE-II:

- Add firmware v3.26 & v3.36 for some models (mandatory installation upon connection)

v5.38 (Released officially)

** 2021-02-10 **

Changes:

- Fix an issue on Android 11 that can break the scan button and make the devices list show empty when VictronConnect has been in background for a while.
- Update links to manuals

VE.Bus Inverter/Charger:

- Include firmware v481

VE.Bus Smart Dongle:

- Add firmware v1.09:
  - Fixed SOC 100 percent while battery monitor disabled bug (mandatory installation upon connection)
- Add mode switch to overview page
- Hide input current limit button when the inverter/charger is off

SmartLithium:

- Add firmware v1.20:
  - Improved recovery mechanism to prevent balancer hangup when an internal error occurs.

Inverter RS:

- Fix frequency unit

v5.37 (Released officially)

** 2021-02-02 **

Fixes Bluetooth issue on Android. v5.37 was released for Android only, other platforms remain on v5.36.

Note that a Google SDK update forced us to change the required type of location permissions to “fine”. As explained in the manual, and in response to various feedback, we are not happy about this at all - its a result of how Google and Android works in combination with Bluetooth Low Energy. Note that VictronConnect is not sending any data to Victron, and for sure its not sending any location data.

v5.36 (Released officially)

** 2021-02-02 **

Changes:

General:

- Added continuous BLE scan: instead of only scanning once when opening VictronConnect, and thereafter only when the scan button was pressed, it will now keep scanning as long as the Device list page is open. Products will appear in the list as soon as they are in range. A note on power consumption and this change: Continuous scanning has no impact on the power consumption of the Victron product. For phones, tablets and laptops, it will of course will have an impact on battery consumption, but that will be rather minimal if even measurable at all. The continuous scan is only active when the app is in the foreground and on the devices list page. When the app is sent to the background or connected to a product, the scanning stops. The refresh buttons remains, pushing it will make VictronConnect scan for VE.Direct devices, refresh the VRM installations list, and restart the Bluetooth scanning just in case it is needed.
- Added Bluetooth signal strength indicator to the Device list page.
- Increase Bluetooth connection timeout. Prevents the retry mechanism to be triggered too early in some old devices.
- Fix custom name length limit when pasting non-ASCII texts
- Show badge on top of the settings icon when a firmware update is available
- iOS: Fix Google Drive and probably other apps doesn't show the option to open firmware files with VictronConnect
- Fix crash reported when closing VictronConnect on macOS Big Sur and iOS 14
- Fix crashes on iOS when bringing back the app from background
- Added the Lynx Smart BMS to the demo list (note that this product is not available for sale yet)

VE.Bus inverter/charger:

- Include firmware v478
- Add VE.Bus system configuration:
    - Guided Parallel, three phase and split phase systems setup
    - Guided standalone mode reset when only one unit is detected
    - Max of three units can be configured, for larger systems, use VE.Bus System Configurator.
    - Detects outdated firmware and version mismatch between units and offers the option to update them during the guided setup when setting up a new system.
- AC switch over info:
    - Show the reason why the grid is rejected
    - Once grid is available again, the remaining time for AC input activation is shown
- Show when AC input is ignored
- Add detection of wrong phase rotation on AC in
- Fix absorption time and interval can't be modified in demos

Inverter RS & MPPT RS:

- Add firmware v1.03 (optional install):
    - Add option in VictronConnect to set the battery state-of-charge to 100% (Inverter RS)
    - Show a warning (#14) on the display if a LiFePO4 battery is not charged due to low temperature

    - Show a hint on the display why the unit does not start (no PV power, remote input off, etc.)
    - Turn off the display backlight if there is no PV power (MPPT RS), this behavior can be changed in VictronConnect
    - Add PV isolation resistance measurement, shut down below 100kΩ (MPPT RS)
    - Update operational temperature range so the unit can be used up to 60°C ambient temperature
    - Improve firmware update mechanism
    - Fix issue that caused a loop “Fetching data…” and “Reconnect” when connecting to a unit using Bluetooth
    - Fix battery low/high warnings during standby/off
    - Fix battery current readout during standby
    - Fix history data: the previous firmware can lose data when restarting/updating firmware
    - Clear history data no longer resets the battery state-of-charge
    - Improve internal power distribution over multiple trackers (MPPT RS)
    - Clear manual equalization active when a re-bulk event occurs
    - Low battery/overload conditions are no longer reported as errors as these are normal operating conditions
    - Shutdown communication interfaces when the power switch is in the off position

Inverter RS:

- Add inverter ground relay enable/disable setting
- Add AC frequency readout
- Add ”#14 battery temperature too low“ error
- Warn about 8:1 ratio when setting float voltage, including the calculation of max PV voltage for the given float voltage value

MPPT RS:

- Warn about 8:1 ratio when setting float voltage, including the calculation of max PV voltage for the given float voltage value
- Add ”#14 battery temperature too low“ error

VRM:

- Add installation filtering by tag
- Fix VRM login on Android 5 phones, this issue was present since first release of the VRM functionality

Cerbo GX:

- Fix Bluetooth connection process can get stuck

Smart Battery Protect:

- Add firmware v2.05 (optional install):
    - Improved Bluetooth disconnect behavior
    - Fixed spurious error E6 (Reference voltage failure)
    - Several internal improvements

BMV & SmartShunt:

- Add BMV-710H, BMV-712 and SmartShunt firmware v4.05 update (optional install):
  - Changed minimum accepted temperature for alarm/relay to -40 Celcius (was -99 Celcius).
  - Fix: Relay/Alarm temperature settings below -17 Celsius accepted.
  - Limit max measured temperature to 100 Celsius.
  - Fix: disable buzzer before entering bootloader/update mode. This will prevent a continuing high pitch beep during the update when the buzzer was active while starting the update. (BMV only)
  - Leave auto cycle status mode by pressing minus button for 3 seconds (same as entering auto cycle status mode). While auto cycle status is enabled: (BMV only)
    - Pressing any button shortly will only enable the LCD backlight.
    - Pressing plus or minus shortly will show the previous/next status item.
    - Pressing setup button for 2 seconds will enable settings menu.
    - Pressing setup and select button simultaneously for 2 seconds will restore default.
  - Fix: enabling auto cycle status when not releasing button right after beep. Keeping minus button pressed when enabling auto cycle status mode, will not cancel the auto cycle status mode anymore. (BMV only)
  - Added “None” option to auxiliary input configuration. The “None” option is the default configuration. Settings 22-31, 39-48, 58-60, 67-68 are disabled in the settings menu (display) when the the aux input is configured to “None”.
  - Fix: wrong relay activation due to using uninitialized voltage measurement at startup.
- Add BMV-70x firmware v3.11 update (optional install):
  - Changed minimum accepted temperature for alarm/relay to -40 Celcius (was -99 Celcius)
  - Added “None” option to auxiliary input configuration. The “None” option is the default configuration. Settings 22-31, 39-48, 58-60, 67-68 are disabled in the settings menu (display) when the the aux input is configured to “None”.
  - Fix: wrong relay activation due to using uninitialized voltage measurement at startup.

Orion Smart:

- Update demo products to make use the same engine shutdown detection settings introduced in latest firmware version

IMPULSE-II:

- Add support IMPULSE-II 24/8 Smart IP44 model using new microprocessor
- Add firmware v3.23 update for IMPULSE-II 24/8 Smart IP44 (optional install)
  - Same as v3.17, but adds support for IMPULSE-II 24/8 Smart IP44 model using new microprocessor

SmartBMS CL:

- Add firmware v1.03 update (optional install):
  - Improved Bluetooth disconnect behavior
  - Fixed spurious error E-B33 (Reference voltage failure)
  - Several internal improvements
- Various UI improvements
- Avoid duplicated alarms

BlueSolar & SmartSolar MPPT:

- Fix PV section shows duplicated when connected through VRM
- Add missing Streetlight settings menu in BlueSolar 100/20 demo

VE.Bus Smart Dongle:

- Add firmware v1.08 update (mandatory installation upon connection):
  - Changing the AC input current limit is now possible for systems that have a VE.Bus BMS. Requires VE.Bus firmware 415 or newer on the inverter/charger. The other limitation, switching between On/Off and Charger-only is unfortunately still not possible for systems that have a VE.Bus BMS.
  - Add ignore AC input status
  - Add default PIN code detection
  - Add detection of wrong phase rotation on AC in
  - Add support for back feed relay switchover status readout
  - Fixed AC input current limit temporarily reports wrong value during AC input switch over
  - Bluetooth related changes:
    - Added VE.Smart networking functionality (sharing battery voltage and temperature sense with for example an Solar Charger)
    - Report when product is connectable or not
    - Improved clearing bond info on pincode change
    - Improved disconnection behaviour

v5.35 (Released officially)

** 2020-11-04 **

Changes

- Fix freeze on Windows at startup and/or when scanning
- Improve VRM connection by retrying to connect before showing a timeout error.
- Fix VRM sign in button doesn't open the browser on iOS 14 when Safari is not the default browser. This issue also affects other links in VictronConnect.
- Add support for the upcoming Lynx Smart BMS
- Improve Venus backlog to xlsx converter:
  - Speed up conversion time by a factor of ~5
  - Remove maximum 500MB sqlite3 backlog file size
  - Show conversion progress
  - Add cancel button

MPPT Solar Chargers:

- Add firmware v1.54 (non-mandatory):
  - Fix load output briefly turning off when charger is enters low power mode, introduced on v1.52 on SmartSolars.
  - Improve error 38 detection for SmartSolars 250/60 and 250/70 models.

VE.Bus Inverter/Chargers:

- Enable high speed communications: Shortens the time needed for retrieve values and settings.
- Increase the Multi/Quattro detection timeout when scanning.

Smart Chargers:

- Fix CSV export: starting at second column, values are shifted left by one column.

Smart Battery Protect:

- Fix sometimes error/alarms notifications are not cleared

BMS-CL:

- Fix sometimes error/alarms notifications are not cleared

Inverter RS:

- Fix charge voltage limits on demo products

MPPT RS:

- Fix charge voltage limits on demo products

v5.34 (Released officially)

** 2020-10-21 **

Changes

- Sort VRM installations by name
- Add timeout when connecting to a Bluetooth product to prevent connection getting stuck and ensure that the retry mechanism is triggered.
- Fix some texts do not update when switching language until the application is restarted
- Improve VE.Smart networking on demo products

Phoenix Smart Charger:

- Add firmware v3.31 update:
    - Add support for VE.Smart networking
        - For now only Vsense and Tsense. Synchronized charging is scheduled for a future release
        - Blink status LEDs briefly once every 4 seconds to indicate VE.Smart networking is active
    - Add history of the last 40 charge cycles, similar as the Blue Smart Chargers
        - Note that the history is the total of all outputs
    - Use re-bulk voltage offset instead of absolute re-bulk voltage
        - The re-bulk voltage is migrated to re-bulk voltage offset based on the lowest setpoint
    - Improved temperature compensation
        - Compensate down to -20°C for bulk and absorption, instead of only 6°C. During float and storage, the compensation is only down to 6°C, as per best practises: to charge a very cold battery, increase the charge voltage; but not to “float” a battery. With this change the Phoenix Smart Charger temperature compensation works the same as our Solar Chargers as well as Multi and Quattro inverter/chargers.
    - Lower the minimum configurable charger current from 25% to 10% * Inominal
    - Add low battery temperature cut-off: stop charging lithium batteries below 5°C (default)
        - Requires VE.Smart networking temperature sensor, e.g. Smart Battery Sense
        - When pressing the Why is my charger off? button in VictronConnect it will state that the charger is off due to a low battery temperature.

        - For the current hardware (Rev1), instead of switching the unit off the setpoints are set to lowest value possible, i.e. 12V and 10% * Inominal for a 12V unit. This for the reason that it cannot be guaranteed that a battery voltage is always present, which is required for the charger to switch off. Some lithium batteries with build-in BMS will cut themselves off in case of over/under voltage or temperature.
        - Note for Victron Smart Lithium batteries, above feature is not relevant. Since then the BMS will disable the charge when the batteries are below 5°C, and also in case of cell over voltage. More clearly: its not necessary to buy a Smart Battery Sense to make sure a Phoenix Smart Charger stops charging a Victron Smart Lithium Battery below 5°C.
    - Add tail current functionality
        - When the charge current is below the threshold for 1 minute, the absorption stage is ended and the charger will switch to float/storage.
    - Add high battery temperature condition to programmable relay
        - Requires temperature sensor, e.g. Smart Battery Sense
    - Allow 0% recondition current
        - This fixes an issue with the VictronConnect lithium preset
        - Setting it to 0% skips the recondition stage, if enabled
    - Add Keep Alive support
        - This improves bluetooth connectability, with VictronConnect
    - Add support for settings changed
- Add remark about voltages when charger has multiple outputs

Solar Chargers:

- Add firmware v1.53 update:
    - Remove improvement, added on v1.52, of the remote voltage sense compensation to speed up filtering. That improvement is postponed for now.
    - Fix bugs that caused the MPPT Control to get stuck on “CONNECTING” as well as “FETCHING HISTORY”. The changes are (a) that text messages are now always sent every 2 seconds and no longer interrupted when a hex message is received; and (b) the History total data is now always announced together with the history day0 data.
    - Includes changes in firmware v1.52:
        - Include low power mode for the small models. Idle current consumption (when PV is around 0V) is reduced by around 70%.
        - Improve remote voltage sense compensation to speed up filtering when necessary and improve voltage control response.
        - Change 100/20 48V default battery changed from 48V to auto detection.
        - Fix remote voltage compensation for small models. The voltage compensation of small MPPTs did not consider some current depended voltage drops, causing the MPPT to have a higher voltage setpoint, up to 200mV, depending on the MPPT current. This FW version fix that.

- Add firmware v3.02 for VE.Can and *.xup based firmware MPPT models:
    - Fix bugs that caused the MPPT Control to get stuck on “CONNECTING” as well as “FETCHING HISTORY”. The changes are (a) that text messages are now always sent every 2 seconds and no longer interrupted when a hex message is received; and (b) the History total data is now always announced together with the history day0 data.
    - Fix bug that resulted in the MPPT Control always showing the history of the moment that the MPPT Control was first connected to the MPPT. (Fix announce of day 0 history data)
    - Includes changes firmware v3.01:
        - Change firmware version number to v3.xx range to avoid confusion between

different solar charger models.
    - Improve error 28 trigger conditions.
    - Improve detection of error 38/39 for 250V models.

- Gray out Rx & Tx settings menu entry instead of hiding them when connected via VRM.
- Fix trend graphs are not shown in demo MPPTs
- Show load output power

SmartLithium:

- Add codes to errors and improve error descriptions

VE.Smart Bluetooth Dongle:

- Add firmware v2.26 update
    - Prevent switching to unsupported baud rates
    - Support keep alive mechanism
    - Fix to prevent fragmented responses which could cause failing update over BLE of attached product

MPPT Control:

- Add support for firmware updates
- Add firmware v1.02 update (mandatory):
    - Solves MPPT Control getting stuck in “FETCHING HISTORY”. Note that there are also fw updates for the solar chargers that solve this bug, but for the VE.Can and *.xup based MPPTs also a different —and more prevalent- bug leading to the MPPT Control not fetching the new history from the MPPT, causing the MPPT Control to always show the history of the moment the MPPT Control was first connected to the MPPT. Because of that, and because updating an MPPT Control requires the power cable that is supplied with it but most likely not installed in most applications, we recommend to update the solar charger first; and then only update MPPT Control in case its still having issues.
    - Makes the communication more robust

MPPT RS:

- Add display settings menu
    - Include temperature unit setting

Inverter RS:

- Add display settings menu
    - Include temperature unit setting

VE.Bus inverter/chargers:

- Fix L3 power output shows the value of L2 output

Battery monitors:

- Fix battery current can't be set higher than 999Ah on iOS when region is set to Sweden.

v5.33 (Released officially)

** 2020-09-30 **

Changes

Orion Smart:

- Add Orion Smart firmware v1.06 update:
  - Fix an issue that causes the engine always considered to be shutdown. This issue only affected systems with engine shutdown detection function enabled and the “Shutdown voltage” set to a value above or equal to 13.30V when updating to the previous v1.05 firmware. Systems using default settings are not affected.

v5.32 (Released officially)

** 2020-09-23 **

Changes

- Fix “Fetching data” message is shown on the background when the alert notification drawer is open.
- Fix connection process gets stuck at 20% when the bonding information is not valid, e.g., after changing the PIN code from a different phone.
- Fix default PIN code warning “Do not warn me again for this product” option sometimes is not applied until the app is restarted.
- Improve behavior when a scan is started before the previously product was actually disconnected
- Changes to Trends UI and zoom functionality
- Show short note when firmware library is empty
- Fix Lithium Iron Phosphate (LiFePo4) preset for non-MPPT products with equalization auto stop mode setting support.

Orion Smart:

- Add firmware v1.05:
  - Add input voltage modulation when input voltage gets below the engine shutdown detection level (Vshutdown) to avoid depleting the starter battery.
  - Add new engine shutdown detection strategy to include a delayed start level to allow the starter battery to recharge for some time after turning on the engine.
  - Add different default input voltage lock-out values for when the charger is at charger mode (12.5V and 12.8V) or at PSU mode (10.5V and 11V).

Phoenix Smart Charger:

- Add remark “History data is for the total of all outputs” to history page (history is only available in beta firmware)
- Improve charge current setting adding minimum, low, and max current presets. Low current preset matches the charger low current mode so the charger LEDs behavior is the same than when enabling by pressing the physical button.

Solar Chargers:

- Add support for future MPPT models

Smart Chargers:

- Add support for VE.Smart networking (only Phoenix Smart Charger, by using a beta firmware)
- Layout fixes and improvements
- Fix reported power supply state
- Fix absorption time description
- Change the way the adaptive absorption time is displayed, make it similar to the MPPT for more consistency.
- Enabled more battery preset capabilities
- Improve re-bulk voltage offset setting
- Add “Why is the charger off?” functionality
- Add low temperature cut-off settings (only supported by beta firmware)
- Add IMPULSE-II Smart IP65 firmware v3.17
- Add Blue Smart IP65 Charger 12/5 firmware v3.22 update

v5.31 (Released officially)

** 2020-09-01 **

Changes

- Fix connection gets stuck showing “Fetching data” when connecting to a Bluetooth dongle in fault state

BMV & SmartShunt:

- Fix issue setting battery capacity to a value greater than 999Ah
- Fix missing decimals for mid-point voltage alarm and relay

Smart Phoenix Inverter:

- Fix disable Bluetooth function

v5.30 (Released officially)

** 2020-08-08 **

Changes

- Fix firmware updates loop on iOS & macOS when updating products based on .xup firmware

v5.29 (Released officially)

** 2020-08-05 **

Changes

- Fix BlueSolar VE.Can MPPT firmware update via VE.Direct Smart Dongle

v5.28 (Released officially)

** 2020-08-03 **

Changes

- Add the date to history CSV exports
- Add a setting to keep screen on while using VictronConnect
- Improve Bluetooth connection
- Allow commas and dots as decimal separator. This is useful on phones/computers with non-matching locale and keyboard layout configuration.
- Fix default battery monitor values when creating a new battery preset
- Unified MQTT and VRM error codes
- Added acknowledgment checkbox on the disable Bluetooth dialog.
- Fix duplicated disable Bluetooth switch/button
- Keep the connecting blur until all the live values are fetched.
- Show battery monitor settings in battery presets only if supported by the product
- Improve error message shown when opening a settings file created with an older VictronConnect version.

Solar Chargers:

- Update “Fixed absorption” description text

VE.Bus Inverter/Chargers:

- Add firmware v475
- Fix when updating the dongle firmware, a wrong warning that corresponds to Multi/Quattro firmware update is displayed.
- Fix VE.Bus product is not recognized after a firmware update requiring to press the scan button.

Orion Smart:

- Add firmware update v1.04 for Non-Isolated models (mandatory update):
    - Fix a bug regarding the temperature compensation of the output voltage.

Smart Chargers:

- Collapse status widget when scrolling
- Add support for future Phoenix Smart IP43 Charger revision 2 models
- Fix “User defined” is shown when selecting Lithium preset from VictronConnect presets library
- Fix vertical scroll bar in live data page is not shown on desktops and tablets when in landscape mode

Lynx BMS:

- Add Lynx Ion BMS support

Battery monitor:

- Fix remaining time shows NaN when soc is lower than the discharge floor setting value

v5.27 (Released officially)

** 2020-07-06 **

Changes

- Improve the warning and information messages in the firmware update page
- Improve troubleshooting information
- Show default PIN code to the connection progress pop-up
- Advice to check the notifications bar when the pairing request doesn't appear on Android
- Only advice to remove the product from the Bluetooth paired devices list when that could be the issue.
- Disconnect every Bluetooth product before starting a new scan. This prevents the state where a product could remain connected after an interrupted firmware update.
- Increase the number of lines logged into the service report.
- Fix *.xup update fails when triggered within a few seconds after VictronConnect start up.

SmartLithium:

- Add firmware v1.19 update (mandatory)
  - Fix issue with 12V batteries where cell 2 and cell 3 had a lower voltage when the battery was not charged for some time. (12V battery model only)
  - Fine-tuned balancer behaviour

v5.26 (Released officially)

** 2020-06-19 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.12 (macOS Sierra) and higher|App Store
- Linux AppImage

Please report bugs and give feedback to these betas via the Disqus comments below. Please note that comments are not public by default, and first go to a moderation queue.

Changes

- Fix freezes for a small amount of time while retrieving installations from the VRM server
- Fix possible crashes after re-scan
- Fix Android crashes and synchronization problems
- Fix devices in range list doesn't refresh when joining an existing VE.Smart network
- Fix settings save/load buttons sometimes remain disabled having to reconnect to activate them
- Fix the PIN dialog keeps the input of the first PIN change when changing the PIN twice on same session

- Remove duplicated demo products
- Do not show the default PIN code warning if there is a mandatory firmware update available
- Improve PIN code reset via PUK error handling
- Fix PIN code reset via PUK on Linux

MPPT Solar Chargers:

- New “charger off reason” feature: Display the actual off reason reported by the charger and offers guidance for troubleshooting possible installation problems. This feature is not available for the following solar charger models:
  - BlueSolar 70/15
  - BlueSolar 75/10
  - BlueSolar 75/15
  - BlueSolar 100/15
  - BlueSolar 100/30 rev1
  - BlueSolar 150/35 rev1
  - BlueSolar 75/50
  - BlueSolar 100/50 rev1
- Disable equalization voltage setting when Lithium preset is selected
- Rename “ESS” state by “External control”

SmartLihium:

- Improve battery status reporting and remove the “Busy” state.

Orion Smart:

- Fix battery preset setting shows “Factory default” instead the name of the selected preset

VE.Bus inverter/chargers:

- Fix firmware update button is disabled when forcing Multi/Quattro detection.
- Add firmware v474

InverterRS:

- Fix history CSV export
- Add SOC and temperature readout to the demo product

Smart Chargers:

- Fix wrong voltage limits on demos

v5.25 (Released officially)

** 2020-05-25 **

Changes

- Mark the VE.Direct Smart Dongle (Rev1) firmware v2.23 as a mandatory update. When a dongle running firmware v2.10 is connected to a BMV-70x the battery reading current is read only once and doesn't update when the value changes.

- Fix an issue that makes firmware updates via VE.Direct cable will not use higher baud rates than 19k2 making the firmware update slower than it should be.

MPPT Solar Chargers:

- Fix an issue that can make the battery voltage settings don't show the 36&48V options when the MPPT actually supports them.

v5.24 (Released officially)

** 2020-05-22 **

Changes

MPPT Solar Chargers:

- Fix a bug that makes battery current readout stop updating
- Fix Re-bulk offset setting shows the offset instead the resultant voltage when modifying it. This issue is only present German translation.

Smart Chargers:

- Fix main widget misalignment when in PSU mode and translation text is too long

v5.23 (Released officially)

** 2020-05-22 **

Changes:

- Fix history CSV export (Solar Chargers & Blue Smart Chargers)
- Fix Multi/Quattro AC Input control battery low voltage condition
- Fix battery settings voltages on Orion Smart demos
- Fix updater issues when the update button is pressed while the connection is not ready

v5.22 (Released officially)

** 2020-05-18 **

Changes:

- Fix new battery presets cannot be created

v5.21 (Released officially)

** 2020-05-18 **

Changes:

- Improved Bluetooth stability on Android
- Fix crash on Android when removing the USB serial port
- Performance improvements, mostly noticeable during connection time.
- Do not show the disable Bluetooth warnings when connected via VE.Direct cable
- VE.Smart network UI/UX improvements
- Fix battery presets edition
- Improve URL scheme registration on Linux
- Fix freezes on macOS where there are Bluetooth devices providing a serial port interface

Solar Chargers:

- Add Bluetooth firmware v2.25
- Add firmware v1.50
    - Improve PV Short Protection detection for 250V models when on ESS
    - Add timeout to join a synchronised charging network
    - Remove error 68. Now, the error will be no longer triggered when the same information comes from BLE and VE.Direct. A decision method based on priority is applied, where VE.Direct has a higher priority when compared to BLE. For more information, see MPPT Error Codes.
    - Fix spurious charge algorithm reset after overshoot/zero current event.
- Add firmware v1.06 (VE.Can models)
    - Update error 68 trigger conditions. Now, the error will be no longer triggered when the same information comes from BLE and VE.Direct/VE.Can. A decision method based on priority is applied, where VE.Direct/VE.Can have a higher priority when compared to BLE. Error will still be triggered if same data is received from VE.Direct and VE.Can. For more information, see MPPT Error Codes.
    - Improved error 38/39 detection when charger is externally controlled (i.e. ESS mode).
    - Fixed issue that could lead the MPPT to trigger error 67 (BMS missing) even when the BMS was present at the network. Also, the error could not be cleared properly.
    - Change error 67 behavior by turning it into a warning, not error. Output voltage drops to the battery base voltage.
    - Fix the reception of the charge current limit. That was a combined issue with Venus OS. The fix for the Venus is available on Venus OS v2.53 or higher.
    - Fix NMEA device instance change when done over complex commands on VE.Can.
- Show PV power of all the synchronised charging MPPT's in the VE.Smart network

Blue Smart Chargers:

- Add firmware v3.21 update:
    - **Added custom battery settings**
    - Added charge cycle history
        - Keeps track of the last 40 charge cycles
        - Keeps track of the cumulative data, like operating time, charged Ah, etc.
    - Improved Bluetooth connectability
        - Fixed issue on some Android phones that kept the connection alive when it must be closed
        - Show charger as not-connectable (greyed out) in VictronConnect, when it is already connected to another device
        - Extend Bluetooth range for Blue Smart IP67 chargers
        - Improved Bluetooth stability when performing a firmware update
    - Changed re-bulk strategy
        - The charger now automatically jumps back to bulk from (almost) all states if the

current demand exceeds the maximum charge current. Previously this was only possible from the float and storage state.
        - A setting is introduced to set a current threshold for jumping back to bulk (default disabled). When the charge current in float or storage exceeds this threshold value it will jump back to bulk.
    - Improved relay clicking when mains is disconnected

VRM:

- Fix app crash can happen on Android on reconnection when bringing back the app from background
- Fix error ”-100“ on poor network connections or Venus devices with high CPU loads, now connection is retried and the error is better handled.
- Do not try to get a list of devices when the user has no full control access to the installation.

InverterRS:

- Add battery soc readout and battery monitor settings
- Add new overview page with current flow lines

VE.Bus Inverter/Chargers:

- Hide temperature compensation setting when Lithium battery setting is enabled
- Add firmware v473
    - Added grid code for Denmark.(based on “Technical regulation 3-3-1 for electrical energy storage facilities”)
    - Added option to limit AC current to/from inverter for the grid codes:Europe, Belgium, Austria and Germany.
    - Added Lock-in/Lock-out on AC input voltage for the Cosϕ function for the grid codes:Europe, Belgium and Austria

Phoenix Smart Charger:

- Add firmware update v3.19:
    - Disable 30 seconds Bluetooth recovery time at power-up
    - Bluetooth can be re-enabled through VE.Direct or by pressing the MODE button for 10s
    - Hide re-bulk current setting; not used, but could still be set

BMV & SmartShunt:

- Increase displayed battery current resolution
- Fix voltage settings limits for BMV-710H Smart

Smart Chargers:

- Make the default max bulk time product specific

v5.20 (Released officially)

** 2020-04-06 **

Changes:

- Include Linux build as part of the releases
- Fix iOS video playback
- Make connection retry mechanism stop after three attempts
- Fix app can freeze when changing layout by resizing the window
- Internal improvements
- Speed up firmware updates for *.dup firmware based products
- Improve alarm notifications panel
- Add connection keep alive mechanism:
    - Fix that on Android, in certain situations the Bluetooth connection remains active when it should be closed.
    - Needs to be supported by the device firmware, at this moment only supported by Smart Battery Protect firmware v2.04.

(New)VRM feature:

- Monitor, configure and update VE.Direct devices remotely.

Android:

- Improve scanning by using a new API
- Add a dialog explaining the location services permission requirement
- Fix random crashes

SmartShunt:

- Show PIN code reset option
- Add history reset button

SmartCharger:

- Improve night mode handling
- Make re-bulk current a battery parameter
- Fix update notification doesn't update when error changes
- Add invalid history data error, including advice of how to recover
- Make changes to charge cycles history in preparation to upcoming new firmware version

InverterRS:

- Add support for InverterRS

VE.Direct Phoenix Inverter:

- Add firmware v1.21 (mandatory):
    - Fix for false “No Calibration” error
- Add demo for Phoenix Inverter 1200VA 230V

Solar Chargers:

- Add missing support for SmartSolar MPPT VE.Can 250/85

SmartBMS CL:

- Add support for Smart BMS CL

Smart Battery Protect:

- Update Alarm and Warnings to better reflect manual
- Add firmware v2.04 update (mandatory):
    - Added Charge Protection, which prevents overheating that happened when the product is installed wrongly, ie. by connecting a charger (e.g. a Multi) to the output. Note that still, also with this firmware update, the product is not to be installed in such manner. It is not designed to handle reverse currents. All currents need to go from IN to OUT. Which also means it cannot be used in combination with an inverter/charger like Multis and Quattros. This protection merely reduces the risk of overheating, smoke and fire in case of such error in the installation- design or -wiring. In detail:
        - When (output is disabled and) output voltage is 0.5V higher than battery voltage and internal temperature is above 45 °C, the output will be enabled.
        - Output will be kept enabled until internal temperature drops below 45 °C for 30 seconds.
        - All this time E8 is blinking on the display and showing an error in VictronConnect.
    - Support indication of default Bluetooth PIN.
    - Support advertising connection state while being connected to VictronConnect.
    - When changing the PIN, drop the existing bond information, such that user needs to pair again when reconnecting.
    - Fix issue with VE.Smart, where communication could come to a halt.
    - Several internal improvements.

GX devices:

- Fix detection of CCGX using old firmware version
- Fix GX device pre-selection on VRM registration

Solar Chargers:

- Fix demo of some models doesn't allow to set the battery voltage to 36 and 48 volts

VE.Bus Inverter/Chargers:

- Add MultiPlus-II firmware v471
- Fix AC low voltage connect value in demos
- Add demo for MultiPlus-II 5000

v5.19 (Released officially)

** 2020-02-20 **

Changes:

- Fix crashes might occur after a firmware update when the continue button is pressed

VE.Bus Inverter/Chargers:

- Include firmware v470 for MultiPlus-II models
    - Improved PWM driving

v5.18 (Released officially)

** 2020-02-13 **

Changes:

- Performance improvements on iOS and at first run for rest of platforms.
- Fix notifications drawer don't update the alarm/warning/error description is some cases
- Order demo groups alphabetically

SmartSolar VE.Can:

- Fix firmware updating via Bluetooth

GX devices:

- Improve Venus network settings layout
- Add new icons for Cerbo GX, Maxi GX, Octo GX and MultiPlus-II GX

Solar Chargers:

- Change default CSV name to SolarCharger instead of BlueSolar

Smart Chargers:

- Add default value to re-bulk current setting to the demo of those models that support advanced settings

Smart Battery Protect:

- Fix load output switch stays at off position when it should be in on position after pressing cancel in the deactivation warning dialog

BMV:

- Fix Input section is overlapped on BMV demos

SmartShunt:

- Add SmartShunt demo products

SmartLithium:

- Add 12V 100&150 Ah models

v5.17 (Released officially)

** 2020-02-03 **

Changes:

- General performance improvements

- Do not show default PIN code warning when there is a mandatory update available
- Fix missing decimal digits and units for trends
- Show a warning when trying to use an invalid firmware file

GX devices:

- Auto select the correct host for the remote console when connected via Bluetooth

Solar Chargers:

- Improve StreetLight settings UX
- Improve TX port and Load output settings UX
- Add support for new models

Blue Smart Chargers:

- Do not show advanced settings on demos when not supported by the charger

Phoenix Inverter:

- Set 60Hz as default freq. for 120V Phoenix Inverter demos, so that it matches the real 120V products that also have 60Hz as default

BMV-712

- Optimise the firmware file format to improve the update speed
    - No changes related, version is kept as v4.03.

Smart Chargers:

- Add re-bulk current setting

VE.Bus Inverter/Chargers:

- Include latest firmware, v469
- Add missing name/model description for some MultiPlus models

v5.16 (Released officially)

** 2019-12-20 **

Changes:

- Fix GX devices discovery on macOS (UPnP)
- Fix Windows 7 is reported as unsupported Operating System

v5.15 (Released officially)

** 2019-12-12 **

Changes:

- Fix an issue that freezes VictronConnect when connecting to a BMV-712 or SmartSolar and there is a Bluetooth interface firmware update available

v5.14 (Released officially)

** 2019-12-10 **

Changes:

- Guide the user when a product is not found:
  - Show a button on the device list page which links to a troubleshoot page with the most common connection issues.
- Make it clear that product is using latest firmware
- Show built-in firmware if there is a firmware update available
- Advice to remove bond when resetting PIN code by using PUK code; Otherwise, if using an invalid bond the puk reset process will fail
- Add SOC to battery settings so now it is possible to manually set it.
- Add storage settings to battery presets
- Check device OS and warn if it is not supported by VictronConnect
- Do not show default PIN code warning if there is a mandatory update available
- Fix trends sometimes don't restore the stored trend views
- Do not show the default PIN security warning when there is a mandatory update available
- Show devices in the devices list even when connection is not possible because are already connected to another phone/computer. Compatible devices:
  - VE.Direct dongles - released in v2.17 for SmartBMV, VE.Direct SmartSolar, PhoenixInverterSmart and VE.Direct external dongle; released in v2.18 for VE.Can SmartSolar.
  - SmartLithium batteries - released in v1.17
  - Smart Battery Sense - released in v1.04
  - IMPULSE-II Smart chargers - since v3.09
  - Phoenix Smart Charger - since v3.08

MPPT Solar Chargers:

- Add a text to advice to remove the jumper in VE.Direct port when changing load output operation mode.
- Fix available options on RX Functions for MPPTs. Small models have all 4 options, bigger models do not have a load output.

Smart Chargers:

- Add settings support for IP65 24/13 & 12/25 models
- Add firmware v3.14 for Blue Smart IP22/IP65/IP67 Chargers:
  - Added option to disable BLE off recovery time of 30s for security reasons. This means that for the Blue Smart IP67 Charger a bluetooth killswitch is introduced, because there is no way to re-enable bluetooth once disabled. For both the Blue Smart IP22 and IP65 the MODE button can be used to perform a bluetooth reset and re-enable bluetooth.

Phoenix VE.Direct Inverters:

- Add firmware v1.19 update for 800/1200VA models:

- Fix for 800/1200VA VE.Direct-Inverters: Power-up fails at a low battery voltage

VE.Bus Inverter/Chargers:

- Add firmware v467 for MultiPlus-II

VE.Direct Bluetooth Smart Dongle:

- Add firmware v2.23. This firmware was already available for rev2 dongles, this is for the first version of the dongle:
  - Support for device off reason when attached to Inverter.
  - Support apparent power when attached to Inverter.
  - TX power for advertisement increased.
  - Add default PIN code detection support.
  - Bonding info is removed when pincode changes.
  - Support mA resolution for SmartBMV battery current
  - Several small stability fixes
  - Advertising with own product ID started if no successful VeDirect communication was possible within 20 seconds (fallback to be able to update dongle at all times).

IMPULSE-II Smart IP65 Chargers:

- Add firmware v3.15:
- Limit charging below 17.4V:
- Trigger a low battery voltage error
- Open the output relay
- Set the charge voltage to 24V
- Limit the charge current to 1A

v5.13 (Released officially)

** 2019-10-28 **

Changes:

VE.Bus Inverter/Chargers:

- Update MultiPlus-II firmware to latest version (v466):
  - New gridcode for France (VFR 2019)
  - Two special gridcodes added for AS/NZS4777. These should be used in systems where the Neutral In and Out are externally tied together.

v5.12 (Released officially)

** 2019-10-28 **

Changes:

- Fix firmware version is not shown in all the cases when the update is completed
- Fix “update succeeded” message is wrongly displayed when trying to update using an invalid

file
- Various user interface fixes and improvements

VE.Smart network:

- Change the way that a VE.Smart network information is presented:
  - Show devices that are in range for the connected product
  - Devices in range signal strength

Smart Battery Sense:

- Add firmware update v1.05

Bluetooth internal and external dongles:

- Add Bluetooth firmware v2.23

MPPT SolarChargers:

- Add MPPT Solar Chargers firmware v1.46:
  - Update marked mandatory only for SmartSolar as these models are affected by the bug described below.
  - Fix bug on the internal temperature measurement that lead to not being able to de-rate the output current due to a high temperature nor triggering the over temperature protection. (Bug introduced on v1.30). This bug is only present in SmartSolar.
- Make 30 day history in demos more accurate
- Add VE.Can MPPT SmartSolar firmware v1.03

BMV-712:

- Add BMV-712 firmware v4.03 (previously v4.01):
  - Fix an issue that makes the buzzer inaudible

VE.Bus Inverter/Chargers:

- Add firmware version 465 update
- Charger settings:
  - Add battery temperature compensation setting
  - Fix “Lithium battery” switch state doesn't reflect the actual value of the setting
  - Change hysteresis for Low DC Disconnect and Restart setting
- Fix crash when an invalid firmware update file is selected
- Add errors notification

Smart Battery Protect:

- Show the correct icon for Smart Battery Protect 48-100

SmartLithium:

- Add firmware version 1.17 update (previously v1.16):
  - Add cell under voltage pre-alarm threshold setting
  - Add support for BMS Pre-Alarm
  - Add Bluetooth On/Off support. **Caution!! Once Bluetooth is disabled it is not**

possible to enable it again.

Blue Smart chargers:

- Add firmware update v3.12:
  - Update for all Blue Smart Chargers: IP22, IP65(exept Blue Smart IP65 Charger 12/25 & 24/13) & IP67
  - Added BLE on/off
    - When BLE is disabled, it will still be temporarily enabled for 30s at power-up. The user can connect within this 30s to re-enable BLE again, perform a firmware update or monitor the device. The connection will remain active when the user connects within the 30s. When the user disconnects, BLE will be disabled.
  - Clear bonded devices when the PIN is changed, except the connected device
  - Advice default PIN
  - Add BLE reset by press and hold the MODE button for 10s
    - Disconnect the active device
    - Restore PIN to default
    - Remove all bonded devices
    - Re-enable BLE
  - Prevent VE.Smart communication from lockup
- Add firmware update v3.11 for Blue Smart IP65XL Chargers 12/25 & 24/13

v5.11 (Released officially)

** 2019-09-18 **

Blog post: VictronConnect 5.9 – Solar Charger improvements and much more

Changes:

Fix VictronConnect could not recover properly after an interrupted bluetooth update of the bluetooth microcontroller/dongles in our products.

Known issues:

On macOS, a firmware update of Multis, Quattros or other devices with a VE.Bus port may fail. This issue was introduced in VictronConnect v5.9. A new VictronConnect version fixing this is expected in the near future. Meanwhile, there is a workaround.

v5.10 (Released officially)

** 2019-09-13 **

Changes:

MPPT Solar Chargers:

- Fix an issue with the MPPT battery presets created with VictronConnect v5.8 and older. Those old presets don’t include values for the new settings introduced in MPPT firmware v1.42. Because of that, when the user selected and re-applied such “old” preset using VictronConnect 5.9, settings like

Adaptive absorption were disabled, while they should be enabled by default.

v5.9 (Released officially)

** 2019-09-11 **

Blog post: VictronConnect 5.9 – Solar Charger improvements and much more

Download links:

- iOS: App Store (Pending of App Store approval)
- Android
- Windows 7 and higher
- macOS 10.10 (OS X Yosemite) and higher|App Store

Changes:

General:

- Trends tab remembers last selected graphs for certain product family
- Improve PIN code change process
- Improve information shown when unable to connect to a product
- Fix PIN code reset via PUK code interface issues
- Fix settings files buttons could not appear when VE.Direct connected
- Fix overlapped text in the Inverter/Charger details page on Windows 10
- Show a warning when using Default PIN via BLE
    - Default PIN code must be always changed to prevent unwanted connections, now we advise it when default PIN code has not been changed
- Firmware updates are no longer mandatory for basic monitoring:
    - Live data page: This page can be accessed without updating the firmware unless the update is highly recommended and marked as mandatory.
    - Setting pages: To view and modify settings it is always necessary to update the product to the latest version included in VictronConnect.
- Do not allow change PIN code to same code
- Update the framework on top of which VictronConnect is built, required to comply with Google Play Store requirements. This will improve the application performance but adds a drawback: We have to drop support for old OS versions, see below.

Android:

- Add ARM64bit build: Takes advantage of all the power of modern CPUs. This is also required by Google Play Store.
- Drop support for Android versions older than 5.0(Lollipop).
- Remove unintentional Android “microphone” and “camera” permissions, they are actually never user by VictronConnect.

iOS:

- Requires iOS version 11 or newer. Oldest iPhone supported now is iPhone 5s.

MPPT Chargers:

- Include firmware v1.42 (v1.43 for some models) for BlueSolar and SmartSolar chargers:
  - The Lithium battery rotary switch preset has been changed. Absorption time is fixed to 2 hours, and it will not stop on low tail current.
  - The re-bulk voltage was lowered from 13.7V to 13.4V (for all battery types).
  - Added four new settings:
    - Adjustable tail current (changeover from absorption to float).
    - Adjustable re-bulk offset voltage (changeover from float to bulk).
    - Adjustable automatic equalization parameters (current / duration).
    - Choose between adaptive- and fixed- absorption time. The adaptive mode is the method that has always been in the algorithm. It adapts the time to the battery voltage as seen in the morning. The fixed absorption time is what it says it is: a fixed time. No multipliers related to voltage in the morning. Setting absorption time to fixed does not disable the tail current mechanism: disable that too to get a 100% fixed absorption time. Note that we advise to not use fixed absorption times for lead batteries.
- Include firmware v1.02 for SmartSolar VE.Can:
  - Synchronized charging with VE.Can. This works the same as with previous models and the Skylla-i.
  - Add ESS support. When connected on VE.Can, the VE.Can device instance must be 0. Just like with the previous BlueSolar VE.Can models.
  - Add BMS support.
  - All new battery charger settings: fixed absorption, tail current, re-bulk offset voltage, max auto equalization time, equalization auto stop and equalization current percentage
  - Support for the Smart Battery Sense and BMV connected via Bluetooth VE.Smart.
- Update built-in presets database to match the new firmware

SmartShunt:

- Add support for new SmartShunt product

BMV:

- Fix empty item in the transmitting list is shown in the VE.Smart networking settings page.

Orion Smart:

- Add firmware v1.02
- Add engine shutdown detection setting
- Fix adaptive mode is not changed when selecting a battery preset

BlueSmart Chargers IP65:

- Enable PUK code PIN reset when the product supports it

Bluetooth:

- Fix PIN code change button it shown multiple times on some devices

VE.Direct Phoenix Inverter:

- Add firmware v1.17
  - Add “ECO search time” setting

    - Add option to disable Bluetooth on Smart models
    - Fix wrong AC output voltage being shown in in some cases

VE.Bus Inverter/Chargers:

- Add latest firmware versions (460 & 463)
- VeBusInverter: Reduce minimum DC Input low restart voltage (24V/48V)
    - The minimum DC Low Restart has been lowered for 24V models from 21.8 to 20.6, and from 43.6 to 41.2 for 48V models. Not for 12V units, due to hardware limitations.

IMPULSE-II chargers:

- Add charge cycles history

v5.8 (Released officially)

** 2019-07-18 **

Notes:

- When viewing the permissions of the Android version of VictronConnect, it shows “microphone” and “camera”. This is unintentional and they are actually never user by VictronConnect. On Android versions >= 6, the individual permissions can be enabled/disabled and the “microphone” an “camera” permissions can stay disabled. These permissions are removed in version 5.9beta2.

Changes:

Inveter/Chargers:

- Add settings and firmware updates for Inverter/Chargers connected via MK3-USB:
    - Firmware version 459 is included in the app and the correct file for the connected product is automatically selected when updating.
    - Only basic settings are included, Virtual Switch and Assistants are not supported
    - Only single unit systems are supported

Orion Smart:

- Add support for Orion Smart converters

GX devices:

- Support Maxi GX and other future GX models
- Make possible to connect to a GX device even if the model is not recognised.

Smart Battery Sense:

- Include firmware v1.04 update

Blue Smart Chargers:

- Update the link pointing to the manual shown when a firmware update fails

Bluetooth products:

- Add Bluetooth disable option for products that supports it, available in the product info page
- Add instructional videos of how to remove the device pairing, required after a PIN code change

VE.Can MPPT:

- Include firmware v1.02
  - Synchronized charging with VE.Can. This works the same as with previous models.
  - Add ESS support.
  - Add BMS support.

SmartSolar chargers, Smart BMV, Smart Phoenix Inverters & VE.Direct Smart Bluetooth dongle:

- Include firmware v2.19:
  - Disable bluetooth option

MPPT Solar Chargers:

- Settings now scale accordingly to the selected battery voltage
- Fix presets can be created with incorrect values from a demo product and therefore when loading it on a real product makes the charger enter in error mode having to restore settings and power cycle it.

General:

- Fix links on firmware update result text doesn't work

v5.7 (Released officially)

** 2019-05-08 **

Changes:

- Fix PIN code change button is not shown

MPPT Solar Chargers:

- Prepare support for future firmware versions

v5.6 (Released officially)

** 2019-05-07 **

Notes:

- There is an issue in this version; the option to change the PIN code is not available. It is fixed in v5.7.

Changes:

- Fix firmware update retry is not triggered when reconnecting after an unsuccessful firmware update.
- Fix disable Bluetooth toggle is shown twice for some products
- Make trends use user selected temperature unit
- Fix typos in Dutch and German translations
- Internal improvements

GX devices:

- Show firmware version when the GX device is running firmware >= 2.30

v5.5 (Released officially)

** 2019-05-02 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.10 (OS X Yosemite) and higher|App Store

Please report bugs and give feedback to these betas via the Disqus comments below. Please note that comments are not public by default, and first go to a moderation queue.

Changes:

- Add support for Phoenix Smart Chargers
- Add new features highlight on home screen
- Add onboarding, shows to the user a brief description of the available options
- Add a button to disable Bluetooth; currently available for:
    - Smart Battery Protect
    - Smart Lithium batteries
    - Smart BMV-712
    - SmartSolar Chargers (only when updated to v1.40 or newer, which is not publicly available yet at this moment)
    - Phoenix Smart Charger IP43
- Improve reset pin code by PUK handling
- Fix the “user defined” is shown when certain battery presets are selected
- Android: Fix crash on devices without Bluetooth
- Small GUI fixes and improvements
- Fix GX log converter day light saving issues.
- Add trend graphics for BMV, MPPT and Smart Battery Sense
    - BMV: voltage, current, power, consumed amp hours, state of charge, starter battery voltage, temperature, mid voltage deviation
    - Smart Battery Sense: voltage, temperature (those two are all this device measures)
    - MPPT: solar voltage, current & power. Battery voltage & current & temperature. Load current (for models that have a load output)
    - It records for max 2 hours; and stops/discards as soon as you disconnect from a device.
- Fix typos and improve wording on various pages
- Set MPPT low-temp cut-off setting resolution to one degree; the previous higher resolution was

pointless.
- Add an option to select Fahrenheit as the unit for temperature. To enable, open the main VictronConnect menu, click settings. Here you'll see the version of VictronConnect as well as the option to change language and temperature unit.
- Fix EasySolar-II GX, MultiPlus-II GX and Generic Venus devices are shown as Unknown devices when discovered over UPnP

v5.4 (Released officially)

** 2019-03-08 **

Changes:

Smart Lithium Batteries:

- Add firmware v1.16 update:
  - Fix temperature inaccuracies. Between different batteries the accuracy of the temperature measurement varied a lot. In this update; three changes have been made to fix that:
    - The battery will, only once, automatically calibrate the temperature measurement when no balancing have been active for four hours.
    - Added "Battery temperature offset" user setting, range -10°C to +10°C. This can be configured through VictronConnect.
    - Stabilized battery temperature indication.
  - So, after updating to this version; the user has can do two things: wait for the automatic calibration to take place. Or go in and set the Temperature offset immediately. When doing so; the automatic calibration will not take place.
  - Enable custom name

Venus devices:

- Add Venus device discovery via UPnP:
  - The device running VictronConnect and the Venus device must be connected to the same local network.
  - Can find a Venus GX when connected to its built-in access point, useful to open remote console and configure network settings.
  - Available functions are:
    - Open remote console
    - Open VRM to visualise data or add the installation to your account when setting it up.
    - See the device IP address

Android:

- Fix toolbar positioning on devices a with tall notch, for example Google Pixel 3XL

v5.3 (Released officially)

** 2019-02-10 **

Changes:

- Fix English language is not selectable
- Improve Spanish translation

Smart Phoenix Inverter:

- Show the correct product icon for 1600/2000VA models

MPPT Solar Chargers:

- Include firmware v1.39 update
    - Fix units sometimes failing when reset to defaults on a test bench; with a power supply connected to the PV inputs rather than a real PV array. See MPPT change log for more details.

BMV Battery monitor:

- Fix “Battery starts synchronized” setting. This is a recently introduced feature in the BMVs; Configuring that feature, #70 START SYNCHRONIZED, on the unit itself worked fine. But in VictronConnect it was not possible to change that setting. Now it works as it should.

Peak Power Pack:

- Fix wrong status is shown: it said `On for thirty minutes`; while it should say `On`.
- Add missing alarms
- Fix “0V” is displayed in case of an over voltage.

v5.2 (Released officially)

** 2019-01-09 **

Changes:

- Fix page device page is not closed after reconnection timeout

New products support:

- Smart Battery Protect
- Smart Phoenix Inverter

BMV Battery Monitor:

- BMV 712 Bluetooth firmware update v2.14
- BMV Battery monitor firmware v3.10(BMV 70x) and v4.01(Smart BMV) update
- Add “Battery starts synchronized” setting

VE.Direct Bluetooth Smart Dongle:

- Firmware v2.15 update:
    - Increased VE.Smart transmission robustness.
    - Start advertising after 20 seconds when no successful VE.Direct communication was possible

MPPT Solar Chargers:

- Add scrollbar to presets list
- Fix history totals text overlap
- SmartSolar Bluetooth firmware v2.14 update:
    - Increased VE.Smart transmission robustness.
    - Start advertising after 20 seconds when no successful VE.Direct communication was possible.

Smart Battery Sense:

- Add firmware v1.03 update
    - Improve Bluetooth range

VE.Bus Inverter/Charger:

- Fix overload alarm icon is missing

iOS:

- Fix PIN code can't be changed because the keyboard overlaps the “Accept” button: Now clicking somewhere on the dialog closes the keyboard.

v5.1 (Released officially)

** 2018-11-23 **

SmartLithium

- Update included firmware from v1.12 & v1.13 to v1.15
    - Add “Allowed-To-Charge minimum temperature” setting
    - By default it disables charge when battery temperature is below 5C.
    - Improved Bluetooth connection
- Fix SmartLithium disappears from the devices list after disconnecting.

BMV Battery monitor:

- Fix an issue that makes BMV disappear from devices list after disconnecting. This issue only affects to BMV which are configured for VE.Smart networking.

MPPT solar chargers:

- Fix AES time show undefined in the algorithm description

Phoenix Inverter:

- Fix AC output setting limits in demo products

macOS:

- Fix products on the devices list page are displayed with the default name instead of the custom name.

Android:

- Improve firmware update robustness

v5.0 (Released officially)

** 2018-10-09 **

Changes:

Firmware updating:

- Fix issue that can cause VictronConnect get stuck at 93% during a VE.Direct product firmware update

MPPT solar chargers:

- Added firmware v1.37 update
- Fix Automatic Energy Selector load output mode is not listed (only for SmartSolar)

BMV battery monitor:

- Fix time remaining displays “0m” when no current is flowing from or to the battery

v4.9 (Released officially)

** 2018-08-23 **

Changes:

VE.Bus Smart Bluetooth Dongle:

- Added firmware v1.07 update
    - Fixed an issue that makes the page show no values in some situations
- Hide SOC items when battery monitor is disabled
- Added missing Multi's model names
- Fix issues when connected Multi/Quattro firmware version is lower than 415.
- Warn about minimum firmware version

MPPT solar chargers:

- Added firmware v1.36 update for 250V models
- Load output: User algorithm 1&2 minimum voltage is now 10V for 12V systems.

BMV battery monitor:

- Added power value reading to the main page
- Fix time to go reported as “Infinite” instead of “0h” when discharge floor SOC level is reached
- Fix high voltage relay setting reports wrong values when editing for a first time in the session

Blue Smart Charger:

- Show correct value for low current setting in demo products

v4.8 (Released officially)

** 2018-07-05 **

Changes:

- Add SmartLithium 24V 200Ah demo
- Fix device filtering needs to be set after each scan

Mac:

- Fix crash when converting big Venus VRM database files to XLSX

VE.Bus smart dongle:

- Add support for VE.Bus Smart Dongle

v4.7 (Released officially)

** 2018-06-09 **

Changes:

- Fix products settings page is empty after automatic reconnection.

iOS:

- Improve iPhone X support

Blue Smart Chargers:

- Fix test stage not being shown for Blue Smart IP65 chargers
- Graph tab: Correct battery percentage in absorption stage description

v4.6 (Released officially)

** 2018-05-29 **

* Android: If you can't open the downloaded file from the downloads list try using a file browser.

Changes:

- Improve firmware update robustness
- Add Chinese translation

MPPT:

- Add firmware v1.33 update for 250V models

    - Further improve PV Short protection.
    - Fix in reporting current/wattage/state when the unit is not charging.

macOS:

- Fix issue that makes settings files not being saved if no ”.vcsf“ extension is manually appended to the filename.

v4.5 (Released officially)

** 2018-04-25 **

Changes:

- Fix French translation for “Switch on before sunrise” in Streetlight settings

Solar Chargers:

- Add firmware v1.32 update for 250V models
    - Improve power-stage shutdown sequence.
    - Improve / speed-up PV Short protection and introduce error code 39
- Fix PV current value stops updating two minutes after connecting
- Fix oldest day record is not exported to CSV file

BMV battery monitor:

- Fix temperature alarm and relay settings are always reported as disabled when Fahrenheit unit is selected

v4.4 (Released officially)

** 2018-03-16 **

Changes:

- Fix custom name max length for non ASCII characters
- Add VE.Smart networking settings to demo products
- Update translations
- Fix hardware failure alarm icon
- Fix live data relay icon
- Small user interface corrections and improvements

Solar Chargers:

- Added firmware v1.30 update, full changelog in https://professional.victronenergy.com
- Added internal bluetooth firmware v2.12 update
    - Add VE.Smart Networking support
- Add low temp cut-off setting, prevents damage in lithium batteries by disabling the charge during low temperature conditions.
- Show battery temperature when available.

    - Temperature is only available when the MPPT is configured in a VE.Smart network where the battery temperature is available.
- Make auto equalization interval the only charge setting that can be modified when a factory default battery is selected
- Send local time to the MPPT: Helps streetlights functionality to synchronize.
- Fix a bug that keeps streetlights on after sunrise
    - Issue occurs when the “At sunset” setting is modified when the “At sunrise” setting is already set to “Switch on before sunrise”.

BMV battery monitor:

- Added internal bluetooth firmware v2.12 update
    - Added support for VE.Smart Networking
- Fix mid-point deviation unit, it was “V” when it should be ”%“

SmartLithium:

- Added firmware v1.12 update
- Add “Allowed-To-Discharge cell voltage” setting
- Fix low cell voltage alarm

VE.Smart dongle:

- Added firmware v2.12 update (only for rev2 units)
- Added support for VE.Smart Networking

SmartBatterySense:

- Added firmware v1.02 update
    - Added support for VE.Smart Networking (Voltage & Temp)

PeakPowerPack:

- Show confirmation dialog before switching to hibernate

v4.3 (Released officially)

** 2018-02-08 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.10 (OS X Yosemite) and higher|App Store

Changes:

- Fix duplicated error message when loading an invalid settings file.
- Allow restoring settings from files created with previous VictronConnect versions

SmartLithium:

- Disable false low cell voltage alarm
- Rename battery to voltage in right panel

MPPT Solar chargers:

- Fix save/load settings functionality on BlueSolar 150/100 model
- Add relay state to live data page
- Add an error in one of the history records of the demo products
- Rename load output to virtual load output on devices without load output
- Add description to day/night detection settings
- History graphs:
    - Hide Bluk, Absorption or Float segments when the state was not reached
    - Improve bar length on days without production
    - Add scrollbars
    - Add mouseover to bars and buttons
    - Fix daily records values are partially hidden on some small screens, for example iPhone 5 & iPhone SE
    - Fix text overlapping due to translations

Phoenix Inverters:

- Fix save and load settings icons are disabled when using VE.Direct cable
- Add mode setting, mode now can be switched between on, off and ECO
- Add support for future models
- Add firmware v1.14 update for 800VA models

Blue Smart Chargers:

- Improve Bluk state description when Li-ion battery is selected

Windows & Mac:

- Add scroll bars to device list and settings pages
- Add mouseover effect to the refresh button in the device list page
- Rename “CCGX log converter” to “Venus log converter”

v4.2 (Released officially)

** 2018-01-07 **

Download links:

- iOS: App Store
- Android
- Windows 7 and higher
- macOS 10.10 (OS X Yosemite) and higher|App Store

Changes:

- Windows: Fix auto-update of VictronConnect
- iOS: No changes
- macOS: No changes

- Android: No changes

Note that in v4.0 and v4.1 the auto-update was not working in Windows hence fixed in v4.2, so Windows users will need to manually download and install this new version. There is no need to first uninstall it; simply download the new version and install it. This will automatically replace any existing install.

v4.1 (Released officially)

** 2018-01-07 **

Changes:

1. MPPT Solar Charger history page:
    1. Fix on historical graph, PMax is displayed in 'kWh' instead of 'W'
    2. Fix yield counter reset button missing
2. BMV
    1. iOS only: fix pressing the plus and minus symbols on the clear value also changed the set value at times when it shouldn't.
    2. Fix Tail current is shown as if its in Amps (current), while actually it is in percentage.
    3. Fix discharged & charged Energy units mix up
    4. Fix Missing “Sync to 100%” and “Zero current calibration” buttons
3. Windows & macOS:
    1. Fix device settings windows for the BMV are all blank.
    2. Fix saving mppt 30 day history to csv doesn’t work.

And our thanks to Damon, Claudio, Justin, Rob, Andre, and others that helped find those bugs so quickly after the release.

v4.0 (Released officially)

** 2018-01-05 **

Changes:

- Completely redesigned user interface
    - Context help for some settings
    - Improved user experience
    - Smoother navigation
    - Tablet layout
    - Responsive layout on desktop platforms
    - Orientation locked to portrait on phones, and MPPT history can go fullscreen & landscape.
- Added translations: Dutch, French, German, Italian and Spanish. By default the system language is chosen
- Improve firmware update robustness when updating through VE.Direct

SmartLithium:

- New firmware update v1.07
    - Internal improvements

MPPT solar chargers:

- Improved history page with graphs
- Added user battery presets library
- Included firmware v1.29 update
- Show the actual state when performing an automatic equalization

Android:

- Minimum required version is Android 4.1
- Dropped support for Android ARMv5
- Notify that the location services are disabled when needed (Bluetooth & Android > 5) and guide the user to the Android location settings page.
- Improved USB OTG connection, fixes firmware update failures and random crashes.
- Fix first connection attempt after introducing the PIN code fails

Windows:

- Dropped Windows XP & Vista support, minimum required version is now Windows 7. The previous version, which can be used on XP, will remain available on our software downloads page.

macOS:

- Minimum required version is now Mac OSX 10.10 (Yosemite)

v3.3 (Windows only)

** 2018-01-05 **

__Changes: __

No changes added, this is a transition version to prevent VictronConnect being updated to v4.0 on Windows XP / Vista.

Windows XP / Vista:

This is the latest version as support for XP / Vista is dropped in v4.0.

Windows 7 and higher:

When updating from v3.2 this version will be installed and v4.0 update will be automatically requested.

v3.2 (Released officially)

** 2017-08-14 **

Changes:

* Always show “Restore factory defaults” button when supported. Button is not shown when VictronConnect doesn not support settings files for the product. * Enable manual firmware updates for Bluetooth products. * Show “Stay close to the device” when updating bluetooth connected devices

Windows & Mac:

- Fix command confirmation dialog, command is not sent when accepted. This issue affects “Restore default settings” button on all products and “Store settings” for Phoenix inverters.

BMV:

- Fix save/load settings buttons not displayed on BMV700

Settings files:

- Add support for the new SmartSolar 75/10, 75/15, 100/15, 100/20, 100/30, 100/50, 150/35 & 150/100.

Demos:

- Add SmartSolar 75/10, 75/15, 100/15, 100/20, 100/30, 100/50, 150/35 & 150/100 to the demo library

Blue Smart Chargers:

- Fix low current mode toggled when opening app from background. If the app is connected to the charger, the charger is in low current mode and the app is sent to background and then opened again the low current mode toggles to normal mode.
- Show the proper firmware error messages when the update fails
- Improve firmware update error message including a link to Victron Live troubleshooting.
- Include firmware v3.0 update.
    - Internal improvements
    - For some models the update might take a little longer, as the the hardware shuts down and it takes a little while to recover from this (approx. 10-15 seconds).

v3.1 (Released officially)

** 2017-08-01 **

Changes:

- Add settings files feature. This enables saving the product settings to a file and then load it later in the same or another product. Besides this, a setting file can be also opened as a demo and use it for diagnosis as it contains a snapshot of the product at the moment the file was saved including history records.
- Add demo products feature. A demo product can be used to:
    - Learn and show the options available for different products.
    - Create a specific setup, save that and send it to a customer so they can put it in their device.

    - Besides loading products from the standard library, it is also possible to load it from a saved file.
    - Use this to review settings made to your installations, make changes and then send them to whoever is at the site so they can apply them.
- Allow filtering of the device list
- Change menu items width to page width
- Feedback when a setting is correctly stored in the device
- Fix “Unsupported firmware version” error when opening BlueSolar & SmartSolar demos
- Fix “Show PIN code” option on PIN code change page
- Fix “Show PUK code” option on PIN code reset page

Windows & Mac:

- Left panel: Improve position of the connected product

BlueSolar & SmartSolar MPPT chargers:

- Fix automatic equalisation interval setting is disabled when “Use default charge settings” is selected
- Add an option to disable the charger.
- Include firmware v1.27 update
    - Add StreetLight night and day detection delay setting
    - Add inverted load on/off mode for Rx port function
    - Remove automatic battery voltage detection option:
    - Automatic battery voltage detection is only done once @ power-up. If the battery voltage is present (>7V) the detected battery voltage is stored and further automatic detection is disabled. If the battery voltage is absent (<7V) the unit operates as a 12V model, automatic detection remains active (@ next power-up).
    - Add manual equalization for some models. Excluded models:
        - BlueSolar 75/50
        - BlueSolar 150/35 rev1
        - BlueSolar 75/15
        - BlueSolar 100/15
        - BlueSolar 100/30
        - BlueSolar 100/50
        - BlueSolar 75/10

Blue Smart Charger IP22:

- Fix an issue that disables night mode or low current mode when reconnecting

SmartLithium:

- Enable reset PIN by PUK code

Android:

- Fix text field, dialogs and buttons rendering issues on devices running Android 7

Windows & Mac:

- Left panel: Improve position of the connected product

v3.0 (Released officially)

** 2017-07-05 **

Download links:

- iOS: App Store
- Android ARMv7
- Android ARMv5
- Android x86
- Windows XP and higher
- Mac OS X 10.8 and higher

Changes:

- Add manual firmware updates for Bluetooth

SmartLithium batteries:

- SmartLithium firmware v1.06 update:
  - Fix a problem with internal communication
- Rename “Communication error” to “Internal communication failure”.

v2.9 (Released officially)

** 2017-06-13 **

Changes:

- SmartSolar 250/85 & SmartSolar 250/100 firmware v1.25 update:
  - Bug-fix in the mppt tracker control: unexpected drops in energy harvest during a sunny day
  - Parameter change: maximum panel current increased from 50A to 70A

v2.8 (Released officially)

** 2017-05-16 **

Changes:

Windows & Mac

- Fix an issue that makes that in certain conditions the latest edited setting is not sent to the product when leaving the settings page.

MPPT Solar Chargers:

- Include firmware v1.24 update for Smart Solar 250/100 and 250/85
  - Bug-fix in the battery voltage setting: the voltage always read as AUTO even if it is manually selected. **Keep in mind that updating the mppt 250/100 or 250/85 from**

v1.23 to v1.24 will change the voltage setting to 'AUTO', make sure to set the battery voltage to the correct voltage after updating.

Phoenix Inverters:

- Improve live data page
- Set minimum value for “ECO minimum wake-up power” setting to 15W.

v2.7 (Released officially)

** 2017-04-25 **

Changes:

MPPT Solar Chargers:

- Include firmware v1.23 update

v2.6 (Released officially)

** 2017-04-20 **

Changes:

- Improve firmware update robustness

MPPT Solar Chargers:

- Include firmware v1.20 update

v2.5 (Released officially)

** 2017-04-18 **

Changes:

Android:

- Fix devices not listed on some HTC phones (and maybe others)

General:

- Add support for 120V VE.Direct Phoenix Inverters
- Add support for future new products

v2.4.2 (Android only, Released officially)

** 2017-04-03 **

Changes:

- Fix firmware update issues on Android 7 devices

v2.4.1 (Android only, Released officially)

** 2017-03-28 **

Changes:

- Improve firmware update robustness

v2.4 (Released officially)

** 2017-03-24 **

Changes:

VE.Direct Bluetooth Smart dongle:

- New firmware update v2.10
  - Improved communications robustness
  - Add support for new VE.Direct dongle

SmartSolar MPPT:

- Show the correct icon when updating bluetooth firmware
- Fix battery voltage can't be set to 48V on some models
- New Bluetooth firmware update v2.10

SmartLitihum batteries:

- Fix cell numbering on live data page
- New firmware update v1.05

Phoenix Inverter:

- Fix a typo in temperature alarms

Peak Power Pack:

- Rename “Mover” to “High current output(mover)” in live data page

v2.3 (Released officially)

** 2017-01-20 **

Changes:

General:

SmartLithium batteries:

- Add new models

BlueSolar & SmartSolar MPPT:

- Streetlight: Increase time offset limits from 720 to 900 minutes
- Add absorption time limit setting

Phoenix Inverter:

- Fix a typo in live data page

v2.2.2 (Released officially, Android only)

** 2016-12-06 **

Changes:

- Fix Google Play filtering issue that made some compatible Android devices appear as not-compatible. Some of the affected phones, but not all:
  - LG L90
  - LG Magna
  - Samsung Galaxy A3
  - Some variants of Samsung Galaxy A5
  - Huawei P8

v2.2 (Released officially)

** 2016-12-02 **

Changes:

General:

- Add custom names for Bluetooth products, can be set on the product info page
- Add support for future products
- Show hardware version(if available) on the product info page

Android:

- Improve compatibility with Android 6 devices
- Keep firmware update running in background when a phone call is received during a firmware update.
- Improve compatible devices filtering on Google Play Store specially with some Android 6 devices. This improvement involves the use of the new Android 6 permission system which makes necessary to request access to device location services to be able to scan nearby bluetooth low energy devices. You must allow VictronConnect to access to the location services when requested if you want to find bluetooth products.

BMV:

- Show relay state (Open/Closed) on the live data page

Phoenix Inverter:

- Add overload, DC ripple and low/high AC voltage alarms.
- Include firmware v1.09 update

Blue Smart Charger IP67:

- Include firmware v2.07 update
- Use the same page layout than Blue Smart Charger IP65

v2.1(Released officially)

** 2016-10-31 **

Changes:

General:

- Increase robustness in case of VE.Direct communication errors
- Add support for future products

Android:

- Fix serial port communication errors on Android 6 (OTG + VE.Direct USB cable)

BlueSolar MPPT:

- Fix a bug on streetlight settings page that made lights don't switch off till sunrise when PWM is disabled and “At sunset, switch lights on for a fixed time” is selected.
- Add constraints to the day/night detection voltages to make sure that night detection voltage is never below the minimum detectable voltage

v2.0 (Released officially)

** 2016-08-30 **

Changes:

General:

- Add reset PIN code by entering a PUK code. This option is accessible by doing a long press on the desired product on the discovery page, right click on desktop. This feature is only available on some products.
- CCGX log to xlsx: Include units in column

Android:

- New VE.Direct Smart bluetooth dongle firmware version 2.09 (fixes issues with Galaxy S5 and probably many other phones)

- Improve updating and connecting for Android 6
- Fixed BlueSolar MPPT 30 day history records are not displayed on Android 4.3

BlueSolar MPPT:

- New v1.19 firmware update included as a mandatory update.
- Add a switch to enable/disable equalisation, no need to set equalization values to 0 anymore.
- Add temperature compensation setting. Check VictronConnect manual to know how it works: https://www.victronenergy.com/live/victronconnect:start#bluesolar_mppt
- Fixed a bug that made the streetlight functionality stop working after toggling the on/off switch. The problem was that the “Switch lights on at sunset” event is disabled when streetlight functionality is set to off but it is not enabled again till the “At sunset” setting is modified by the user. This fix also detects if the issue is present on the configuration and automatically fixes it when opening the streetlight settings page.

Blue Smart Charger IP65:

- Improved page layout on desktop platforms
- New v2.03 firmware included:
  - Reduce connection problems, esp. in combination with Android 6
  - Fixes issues with Galaxy S5 and probably some other phones
  - Added identification: LEDs blink for 2 seconds when connecting
- Add support for future Blue Smart Charger models

v1.9 (Released officially)

** 2016-07-20 **

Changes:

General:

- Add support for future products

Phoenix Inverter:

- Hide “Low battery shut down” setting when dynamic cutoff is enabled.

BlueSolar MPPT:

- Make possible to select 36 and 48V battery voltage on BlueSolar MPPT 150/35 rev2

BMV:

- Include BMV-70x firmware v3.08 update

v1.8 (Released officially)

** 2016-07-04 **

Changes:

Phoenix Inverter:

- Include Phoenix Inverter firmware v1.03 update
- Fix Phoenix Inverter “Low battery shutdown voltage” setting is locked and showing “Dynamic”

v1.7 (Released officially)

** 2016-06-29 **

Changes:

General:

- New functionality: Convert CCGX log files to .xlsx Excel sheet (only Windows & Mac OS X)
- New functionality: Export 30-day BlueSolar MPPT history as CSV
- New functionality: “Create service report” option generates a diagnostics report for sending it to Victron Energy service in case of any issue.
- Improve dialogs, now all the dialogs are better centred on the screen
- Android: Shorten connecting time during updating
- Fix an issue that makes necessary to scan several times before Peak Power Pack is shown on the devices list when using VE.Direct USB interface(issue introduced in VictronConnect v1.6)
- Fix issue that makes one of the Accept/Cancel buttons sometimes doesn't appear on iOS dialogs
- Remove some unused icons, now the install size is sightly smaller on iOS

BlueSolar MPPT:

- Send local time to the MPPT when accessing to the streetlight settings and when switching on streetlight function. This makes the streetlight timer works more accurately prior to the synchronisation with the solar activity.
- Streetlight: Don't hide sunrise options when “Switch on till sunrise” is selected
- Load settings: Add boundaries for high and low voltage levels
- Battery settings: Make possible to set equalisation voltage to 0V

Phoenix Inverter:

- Add dynamic cutoff settings (dynamic cutoff will be available on the next firmware, v1.04)

Peak Power Pack:

- Fix size of the icon shown in the live data page

VE.Direct Bluetooth Smart dongle:

- Include new firmware update v2.07 that improves compatibility with Android 6*

** *Tested phones **

The following phones are tested and working but the update should also fix compatibility with many other Android 6 phones.

- Sony Xperia Z5
- Motorola Moto G 2014

- HTC One M9
- Samsung Galaxy S5 [1] [2]

[1] There still one issue that randomly makes the connection fail, to make it work again disable/enable bluetooth.

[2] To make it easier we recommend to use another phone to update the dongle firmware but is also possible to use the Samsung phone to do it, then some extra steps are necessary:

1. Remove the dongle from the paired devices list on the phone bluetooth settings
2. Close VictronConnect
3. Disconnect the dongle from the VE.Direct port and connect again while pressing the clear PIN code button to start the dongle in boot loader mode. Blue and red LED's will blink alternatively.
4. Open VictronConnect and click on the dongle item and start the update process

After entering in boot loader mode you have 30 seconds to connect to the dongle before it goes back to the normal mode. Start the process from step 1 if something fails. After the dongle is updated you might have to disable and then enable bluetooth again.

v1.6 (Released officially)

2016-06-10

General:

- List unrecognised Victron products the device list page. Useful when running an outdated VictronConnect version with new products.

BlueSolar MPPT:

- Fix “Use default charge settings” item behaviour when switching the rotary switch while battery settings page is displayed.(Only affects to MPPT with rotary switch and fw v1.17)
- Include BlueSolar MPPT firmware v1.17 as mandatory update

v1.5 (Released officially)

2016-05-02

- Fixed PIN code change function

v1.4 (Released officially)

2016-04-27

- New feature: Manual firmware updates. Manual firmware update option available on the product info page. Users with a BlueSolar MPPT can test this feature with the new v1.17 firmware available on https://professional.victronenergy.com.
- General small bug fixes and improvements

iOS:

- Fix issues with dialogs displaying long messages.

New firmwares included on this version:

- Phoenix inverter 250 and 375 VA fw: v1.02 (mandatory)
- VE.Direct Bluetooth Smart dongle fw: v2.06(mandatory)
    - Fix issue when connected device update was interrupted, resulting in device not being seen by VictronConnect
    - Show both leds when there is no vedirect device

v1.3 & 1.3.1(iOS) (Released officially)

2016-03-31

- New feature: Firmware updates. Firmware updates are included inside VictronConnect, when connecting to a product with a new firmware available the update page will pop up.
- Included firmwares on this version:
    - VE.Direct Bluetooth Smart dongle fw: v2.05 (mandatory*)
    - BlueSolar MPPT VE.Direct fw: v1.16 (mandatory*)
    - Phoenix inverter 250 and 375 VA fw: v1.01 (mandatory* and fixes bug in changing low battery settings)

Phones/Tablets

- Fix the app state handling, now VictronConnect disconnects from the product when the app is sent to the background or when receiving a call.

Android

- Improved USB OTG support on Android 6 (Marshmallow)

BlueSolar MPPT

- Added total yield (system and resettable) to the history page.
- Remove white space displayed on history records for MPPT without load output
- BatterySettings: Only supported voltages are displayed.
- Fix an issue that sends the voltage values automatically when entering to the battery

BMV

- Correct maximum starter battery voltage on history page

Phoenix inverter

- Fix wrong product name displayed
- iOS: Fix product info page doesn't open
- Change power bar color to red when the nominal power is passed
- Display a warning box notifying that the “Store settings” button should be pressed to make the changes permanent

Known issues:

- iOS: Wrong splash screen during launch(fixed in v1.3.1)

* Products with firmware updates marked as mandatory should be updated to continue using VictronConnect

v1.2 (Released officially)

2016-03-03

- New platforms: Windows and Mac OS X versions are now available.
- Add action bar to iOS keyboard with a minus (-) button and a “Done” button
- Fix “Clear history” button on MPPT and BMV
- Use different name in each step during the bluetooth dongle firmware update. (VE.Direct BLE dongle (legacy) and VE.Direct BLE dongle 2 (legacy))
- Show Bluetooth/VE.Direct icon depending on the connection type.(Android and MacOS)

BMV

- Fix an issue that returns a wrong value by setting to zero the alarm/relay temperature settings
- Fix typo in temperature warning message shown on the live data page
- Improve max/min values handling on alarms/relay settings pages

BlueSolar MPPT

- Show description of the selected load mode algorithm
- Fix “Clear history” button: it was partially hidden on the history page
- Auto scale yield and consumption unit on the history page from kWh to Wh
- Allow negative values for midnight-point shift on streetlight settings
- Add load current to the live data page
- Fix information box that warns the user that 30 day history is only available since firmware v1.16.

Known issues:

- Values doesn't fit controls on systems with the default font size set to large. The temporary workaround to fix the issue is to set the system default font size to normal. (Mac & Windows)
- Phoenix Inverters:
    - 250VA Inverter is displayed as 375VA
    - 375VA Inverter is displayed as 250VA
    - 24V and 48V devices: In combination with Inverter Firmware 1.00 the (alarm) low battery voltage thresholds are displayed wrong and cannot be modified correctly. However the thresholds used by the Inverter are the correct ones, as listed in the user manual of the inverter. Solution: upgrade Inverter SW version to 1.01 or (newer).
    - On iOS only, clicking to the “Product info” button doesn't open the info page.

v1.1.5 (Released officially)

2016-02-02

- Fix BlueSolar MPPT streetlight settings. In versions v1.1.0 up to and including v1.1.4 it seemed like the streetlight settings were stored correctly, but they were not.
- VE.Direct BLE dongle renamed to VE.Direct Bluetooth Smart dongle

Known issues:

- On iOS it is not possible to set a negative value. Only a problem for BMVs when setting relay and alarm thresholds for temperature.

v1.1.4 (Released officially)

2016-01-28

- Add support for VE.Direct BLE dongles.
- Always go back to device main page on disconnection
- Fix consumption scale for BlueSolar MPPT history records
- Improve dialog style under iOS
- Improve appearance on small screens (<4”)
- Correct TextField font
- Disable settings button while connecting
- Fix PWM information box in the streetlight settings page
- General small bug fixes and improvements
- Add new MPPT SmartSolar products
- Improve Blue Smart Charger page on small screens
- Update settings values immediately when restoring to defaults
- Fix “-0Ah” values for the BMV “Consumed Ah”.

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