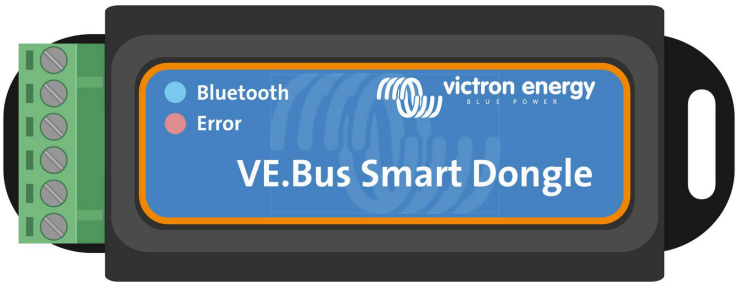
ENGLISH



VE.Bus Smart Dongle

Rev 07 - 04/2024

This manual is also available in HTML5.

Table of Contents

1. Introduction **1**

2. Installation **2**

2.1. What's in the box 2
2.2. Installation without external battery sensor 2
2.3. Installation with an external battery sensor 3
2.4. Updating firmware 4
2.5. VE.Smart Networking 4

3. Operation **6**

3.1. LED Status codes 6
3.2. Inverter/charger control and monitoring 6
3.3. Usage as a battery sensor 7
3.4. Usage with a GX device 7

4. Specifications **9**

4.1. Compliance 9

5. Troubleshooting **10**

6. Appendix **11**

6.1. Dimensions 11

1. Introduction

The VE.Bus Smart dongle is a Bluetooth accessory for inverter/chargers and inverters* with a VE.Bus port.

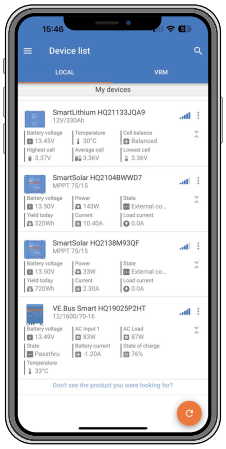
The dongle has the following features and functionalities:

- Remotely control the inverter/charger via Bluetooth and the VictronConnect app. The inverter/charger can be switched to on, off or charger-only and the AC input current limit can be adjusted.
- Remotely monitor the inverter/charger via Bluetooth and the VictronConnect app. The AC and DC parameters, device status, warnings or alarms can be monitored.

  This includes Instant Readout to display the most important data of the inverter/charger on the Device list page without the need to connect to the product. This includes visual notifications of warnings, alarms, and errors that enable diagnostics at a glance. Please see the VictronConnect manual for details.
- The dongle can be connected to a single inverter/charger or multiple inverter/chargers set up in parallel and/or 3-phase.
- Measures the battery temperature and voltage.
- Can act as a battery temperature and voltage sensor for an inverter/charger and/or for VE.Smart Networking.
- Can be connected to an external temperature sensor, rather than using its own (default) temperature sensor.

Note that the dongle cannot be used to configure an inverter/charger. It is also not possible to update the firmware of an inverter/charger via the dongle. Read the VictronConnect VE.Bus manual for more specific information on configuring and updating the firmware of an inverter/charger.

*) In the remainder of this document, we will refer to inverter/chargers instead of both inverter/chargers and inverters. If the dongle is used with an inverter, the charger-related features will not be available, such as monitoring AC parameters, switching a unit to "charger only" mode or adjusting the AC input current limit.



Instant Readout

2. Installation

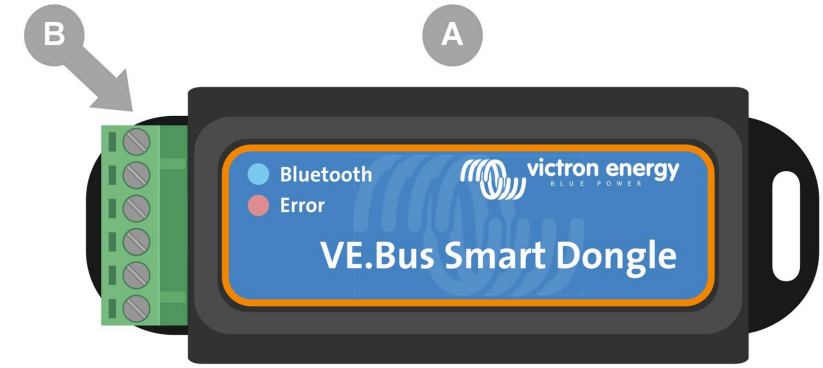
2.1. What's in the box

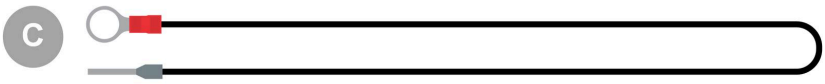
A. VE.Bus Smart Dongle.

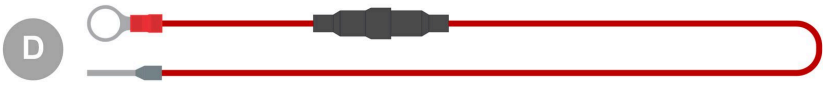
B. Removable terminal block with screw terminals.

C. Black battery (-) connection wire with 10mm eye terminal.

D. Red battery (+) connection wire with 10mm eye terminal and inline fuse.



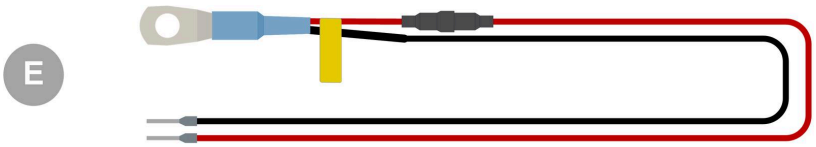




What's not in the box

E. Temperature sensor for BMV-712 Smart and BMV-702. This temperature sensor can be used as an optional external temperature sensor. Note that the temperature sensor is shipped with the label “CAUTION: BMV702 only!”. This caution can be ignored for use with the VE.Bus Smart dongle.

F. UTP RJ45 cable. This cable is required to connect the VE.Bus Smart Dongle to the inverter/charger or inverter. This cable needs to be purchased separately.



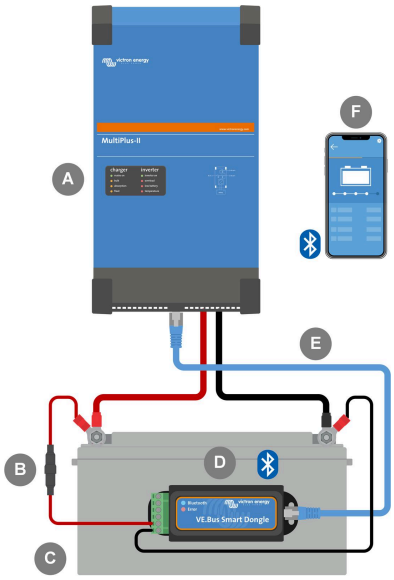


2.2. Installation without external battery sensor

This is the default installation method, whereby the dongle's internal temperature sensor is used.

1. Remove the connection terminal block from the dongle.

2. Connect the red power wire to the B+ terminal of the terminal block.
3. Connect the black power wire to the B- terminal of the terminal block.
4. Connect the eye terminal of the black power wire to the negative terminal of the battery.
5. Connect the eye terminal of the red power wire to the positive terminal of the battery.
6. For battery temperature sensing, mount the dongle on top or on the side of the battery, using the dongle's adhesive mounting. If battery temperature sensing is not required, the dongle can be mounted near the battery using adhesive mounting or screws.
7. Plug the terminal block into the dongle.
8. Connect the dongle RJ45 terminal to the inverter/charger RJ45 terminal using an RJ45 UTP cable.



ID	Description
A	Inverter/charger or inverter with VE.Bus port.
B	Fuse.
C	Battery.
D	VE.Bus Smart dongle affixed to the battery housing.
E	RJ45 UTP cable.
F	Smartphone communicating via the VictronConnect app and Bluetooth with the VE.Bus Smart dongle.

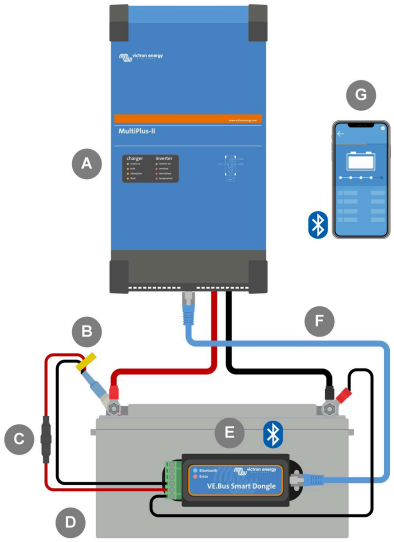
2.3. Installation with an external battery sensor

This is an optional installation method, whereby an external temperature sensor is used instead of the dongle's internal temperature sensor.

This installation requires the Temperature sensor for BMV-712 Smart and BMV-702. Note that this temperature sensor is a different temperature sensor than the one that is included with the inverter/charger. It needs to be purchased separately.

Note that the red power wire included with the dongle is not used in this installation. The red power wire will be replaced by the red wire of the temperature sensor.

1. Remove the connection terminal block from the dongle.
2. Connect the temperature sensor red wire to the B+ terminal of the terminal block.
3. Connect the temperature sensor black wire to the T- terminal of the terminal block.
4. Connect the black power wire to the B- terminal of the terminal block.
5. Connect the eye terminal of the black power wire to the negative terminal of the battery.
6. Connect the temperature sensor eye terminal to the positive terminal of the battery.
7. Mount the dongle on the battery using the dongle's adhesive mounting, or mount it near the battery using screws or the adhesive mounting.
8. Plug the terminal block into the dongle.
9. Connect the dongle RJ45 terminal to the inverter/charger RJ45 terminal using an RJ45 UTP cable.

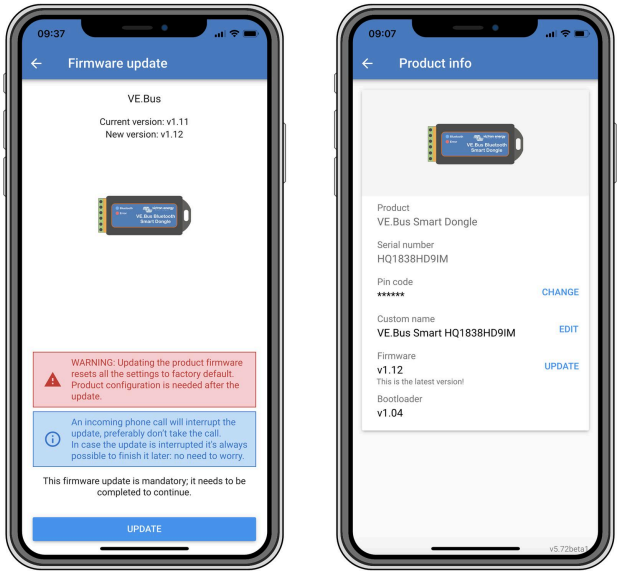


ID	Description
A	Inverter/charger or inverter with VE.Bus port.
B	Temperature sensor for BMV-712 Smart and BMV-702
C	Fuse.
D	Battery.
E	VE.Bus Smart dongle affixed to the battery housing.
F	RJ45 UTP cable.
G	Smartphone communicating via the VictronConnect app and Bluetooth with the VE.Bus Smart dongle.

2.4. Updating firmware

Before using the dongle, ensure that its firmware, the inverter/charger firmware and the VictronConnect app version are all up to date.

- Update the inverter/charger to the most recent firmware version. Note that this needs to be at least firmware version xxxx415 or higher (or version xxxx419 or higher for full functionality).
- Make sure you are using the most recent version of the VictronConnect app.
- Update the firmware version of the dongle. Do this by connecting to it using the VictronConnect app. On the first connection, the VictronConnect app will likely indicate that the firmware needs to be updated. To update the dongle, follow the prompts by the VictronConnect app.
- To perform a manual firmware update or to check if the dongle has the most up-to-date firmware, go to the product settings page via the cog symbol ⚙ in the top right-hand corner and then click on the 3-dot symbol ⋮ in the top right-hand corner of the setting page and select "product info".



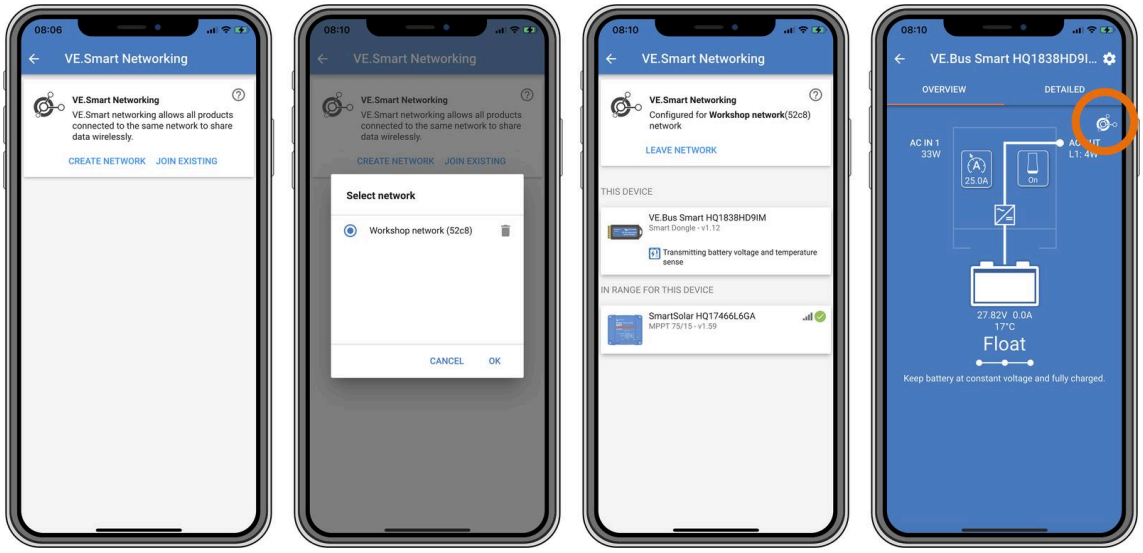
VictronConnect firmware update and product info screens.

2.5. VE.Smart Networking

The dongle supports VE.Smart Networking. When the dongle is part of VE.Smart Networking it can transmit battery temperature and battery voltage data to the network.

To add or set up VE.Smart Networking, navigate to the VictronConnect dongle settings page by clicking the cog symbol ⚙ in the top right-hand corner. On the settings page select "VE.Smart Networking". You have two choices: create a new network or join an existing one.

When the dongle is part of VE.Smart Networking, this is indicated by a symbol on the dongle VictronConnect overview page. See the orange circle in the image below on the right. When clicking on the symbol, you can check if the dongle is transmitting to the network and what type of data it is transmitting.



VictronConnect VE.Smart networking screens.

For more information on VE.Smart Networking also see the VE.Smart Networking manual.

3. Operation

When the dongle is connected to an inverter/charger and the inverter/charger has been switched on via its main power switch, it takes a bit of time before the dongle detects the inverter/charger. It is initially listed in the VictronConnect device list as a VE.Bus Smart dongle. Once the detection is complete, it will be listed as an inverter/charger. Note that it might be necessary to refresh the device list before the dongle is listed as an inverter/charger.

When the dongle is not connected to an inverter/charger, it is listed as a VE.Bus Smart Dongle. The dongle can be used without being connected to an inverter/charger. In this scenario, it operates as a voltage and temperature sensor and can be used for battery monitoring in VE.Smart Networking.



VictronConnect screens without and with inverter/charger connected.

The dongle can operate as a primary and as a background information source. It will assume either role automatically depending on whether a GX device is connected to the inverter/charger.

3.1. LED Status codes

Blue LED	Red LED	Bluetooth connection State	Dongle state
Slow blinking	Off	Not connected	The dongle is operational and ready to connect to the VictronConnect app.
On	Off	Connected	The dongle is operational and is connected to the VictronConnect app.
Off	Off	Not connected	The dongle is not operational. Probably because it is not powered, check the fuse or the wires between the dongle and the battery connection.
Fast blinking (alternating)	Fast blinking (alternating)	Not connected	Firmware update.
On	Slow blinking	Connected	Firmware update.
On	Fast blinking	Uploading	Firmware update.
Fast blinking	Off	Programming	Firmware update.
On	On	Disabled	The dongle is not functional (hardware error). The dongle is not visible in the VictronConnect app and will not transmit battery temperature and voltage to the inverter/charger.

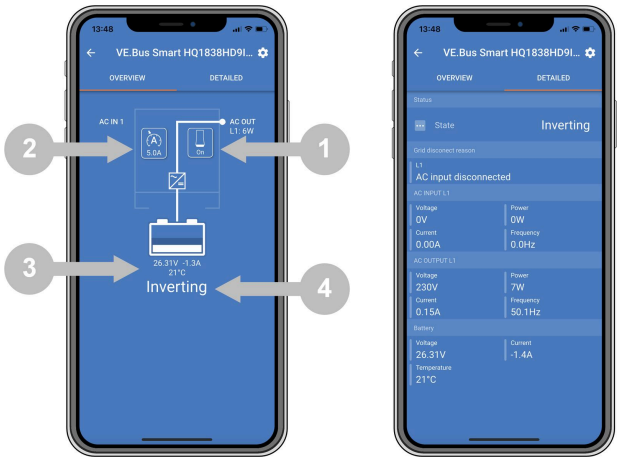
3.2. Inverter/charger control and monitoring

The dongle can control and monitor the inverter/charger via the VictronConnect app.

The "overview" page contains the following:

1. The inverter/charger can be turned on, off or set to charger-only mode via the switch symbol as indicated in the below image.
2. The AC input limit of the inverter/charger can be adjusted via the dial symbol as indicated in the below image.
3. Battery voltage, current and temperature are shown.
4. The device status is shown.

More detailed inverter/charger information can be seen on the "detailed" page.



VictronConnect app "overview" and "detailed" screens.

Note that if a Digital Multi Contol panel (DMC) is connected to the same system as the dongle, the DMC will override the on/off/charger-only and current limit control features of the dongle. The dongle can only monitor the battery and inverter/charger parameters and act as a temperature and voltage sensor but cannot control the inverter/charger.

3.3. Usage as a battery sensor

The dongle measures the battery temperature and voltage:

- The battery temperature measurement allows the inverter/charger, or charge sources that are connected to VE.Smart Networking, to adjust the charge voltage to compensate for battery temperature.
- The battery voltage measurement allows the inverter/charger, or charge sources that are connected to VE.Smart Networking, to adjust the charge voltage to compensate for cable voltage losses that can occur during charging.

For more information about temperature and voltage compensation, see the inverter/charger manual.

Note that the inverter/charger does not use the dongle temperature and voltage measurements if the inverter/charger is connected to a GX device and a CANbus battery (smart battery). The data from the smart battery will override the data from the dongle.

3.4. Usage with a GX device

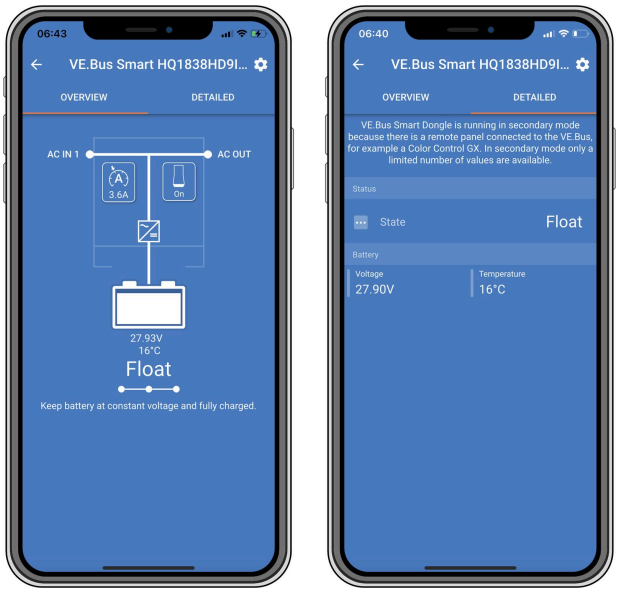
In systems with an inverter/charger and GX device but no other source of temperature and voltage, the data from the dongle will be used by the inverter/charger and the GX device.

In systems with a GX device, where another source of temperature and voltage data, e.g. from a CANbus battery (smart battery), the data from the smart battery will override the data from the dongle. In this scenario, the data from the smart battery is used by the inverter/charger and GX device. The dongle will still provide live information via its VictronConnect interface, but the system will use the data provided by the smart battery.

A GX device has priority over the dongle and should always be able to access all data. When power is applied to the dongle, or after a firmware update, the dongle will start up in background mode. The VE.Bus communication ports will be monitored for 30 seconds. If no GX device is detected, the dongle will switch to primary mode, and all supported data will be available. While switching modes, VictronConnect will temporarily indicate an “unknown” VE.Bus state. The dongle continuously monitors the VE.Bus for GX device activity. It will switch itself to background mode as soon as a GX device is detected or changes to primary mode when a GX is not detected.

The dongle monitors the VE.Bus to check if a GX device is supplying the inverter/charger with battery voltage and temperature data. It takes around 4 minutes after power-on or a reset before the dongle decides whether or not to transmit the battery voltage and temperature.

Due to restrictions in the VE.Bus communication protocol, only one device can access inverter/charger data at a time. When connecting with the VictronConnect app to the dongle while a GX device is connected, only the battery temperature and voltage and inverter/charger state are displayed, and the AC voltage, current, and power readings are missing.



VictronConnect screens when the dongle is connected to a GX device.

4. Specifications

VE.Bus Smart Dongle	Specifications
Operating Input voltage range (Vbat)	8 – 70Vdc
Current draw (@12V) - BLE not connected to VictronConnect, VE.Bus connected	Not joining a VE.Smart network <6mA Joining a VE.Smart network <9mA
Current draw (@12V) BLE connected to VictronConnect, VE.Bus connected	Not joining a VE.Smart network <7mA Joining a VE.Smart network <9mA
Operating temperature	-20 to +50°C / 0 to 120°F
Humidity	Max. 95% (non-condensing)
Protection grade	IP20
Material and colour	ABS, matt black

4.1. Compliance

SIMPLIFIED EU DECLARATION OF CONFORMITY: Hereby, Victron Energy B.V. declares that the VE.Bus Smart dongle is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://ve3.nl/6E.

UK PSTI STATEMENT OF COMPLIANCE: We, Victron Energy B.V., confirm that our product VE.Bus Smart dongle complies with the security requirements outlined in Schedule 1 of The Product Security and Telecommunications Infrastructure (Security Requirements for Relevant Connectable Products) Regulations 2023. The official Statement of Compliance can be downloaded from https://ve3.nl/6E.

5. Troubleshooting

Q: I only see a battery page screen in the VictronConnect app, but I do not see inverter/charger pages.

A: The dongle is not communicating with the inverter/charger. Check if it is plugged into the inverter/charger via an RJ45 UTP cable. Or, if it is plugged in, check the integrity of the RJ45 cable.

Q: I cannot see the inverter/charger data; only the battery data is displayed in the VictronConnect app.

A: Check if the inverter/charger has been turned on via its main switch, and check if the dongle is plugged into the inverter/charger via an RJ45 UTP cable. Or, if it is plugged in, check the integrity of the RJ45 cable.

Q: Can the dongle be used together with the Digital Multi Control panel (DMC)?

A: Yes, but in this scenario, the dongle cannot switch the inverter/charger to on, off or to charger-only, only the DMC can.

Q: Can the dongle be used together with a VE.Bus BMS?

A: Yes, but in this scenario, the dongle cannot switch the inverter/charger to on, off or to charger-only, only the VE.Bus BMS can. If full functionality of the dongle is required, use a VE.Bus BMS V2 instead.

Q: It is not possible to change the AC current limit.

A: Update the inverter/charger firmware to version xxxx419 or higher.

Q: What are the terminal connections marked "CD" and "Relay" used for?

A: These connections have no function and are not used.

Q: The dongle is measuring a too low battery voltage and an external battery sensor is used. The inverter/charger is overcharging the batteries as a result of this.

A: Check that the B- wire is connected to the battery minus. If this wire is not connected the dongle measures a too low battery voltage. See chapter Installation with an external battery sensor [3].

Q: The dongle battery voltage reading is approximately 0.6V too high in a 12V system, 1.2V in a 24V and 2.4V in a 48V system. The inverter/charger is undercharging the batteries as a result of this.

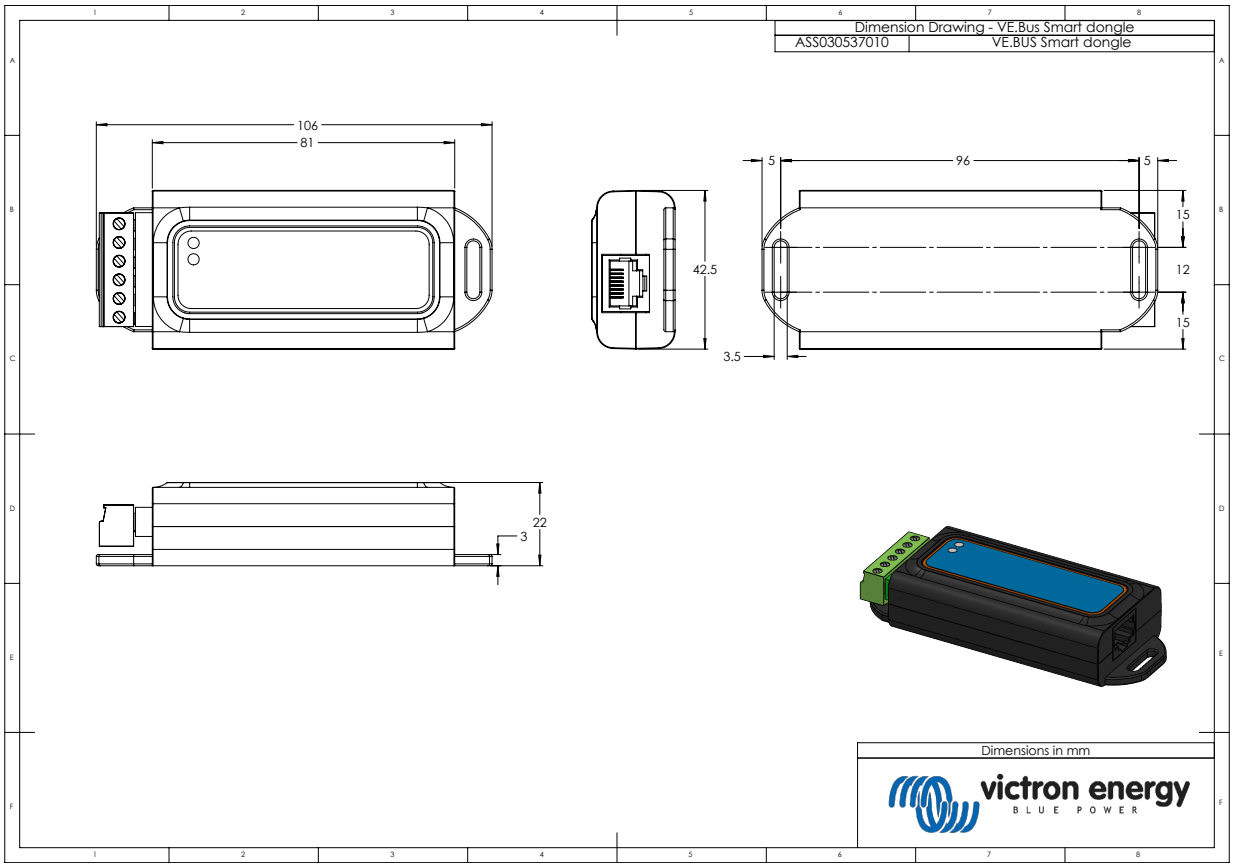
A: The dongle is faulty.



See also the VictronConnect manual and the VE.Smart Networking manual.

6. Appendix

6.1. Dimensions



ENGLISH



VE.Direct Bluetooth Smart dongle

Rev 03 - 07/2023
This manual is also available in HTML5.

Table of Contents

1. Introduction 1

1.1. Introduction 1
1.2. Features 1
1.3. Limitations 2
1.4. Compatible products 2
1.5. The VictronConnect App 2

2. Installation 5

3. Operation 6

3.1. LED Status codes Bluetooth module 6
3.2. Update firmware 6

4. Troubleshooting and Support 8

4.1. Unable to connect to the dongle 8

5. Warranty 9

6. Specifications 10

6.1. Enclosure dimensions 10

1. Introduction

1.1. Introduction

The VE.Direct Bluetooth Smart Dongle connects to a non-Bluetooth VE.Direct Victron product which can then be accessed via Bluetooth using the VictronConnect app for easy monitoring, setup and firmware update purposes.

The dongle can be used with any Victron Energy product that is equipped with a VE.Direct port (with exception of GX devices. It is especially useful for products that do not have built-in Bluetooth, such as: BMV 700 and 702 battery monitors, Phoenix Inverters VE.Direct or the BlueSolar MPPT Solar Charge Controllers.

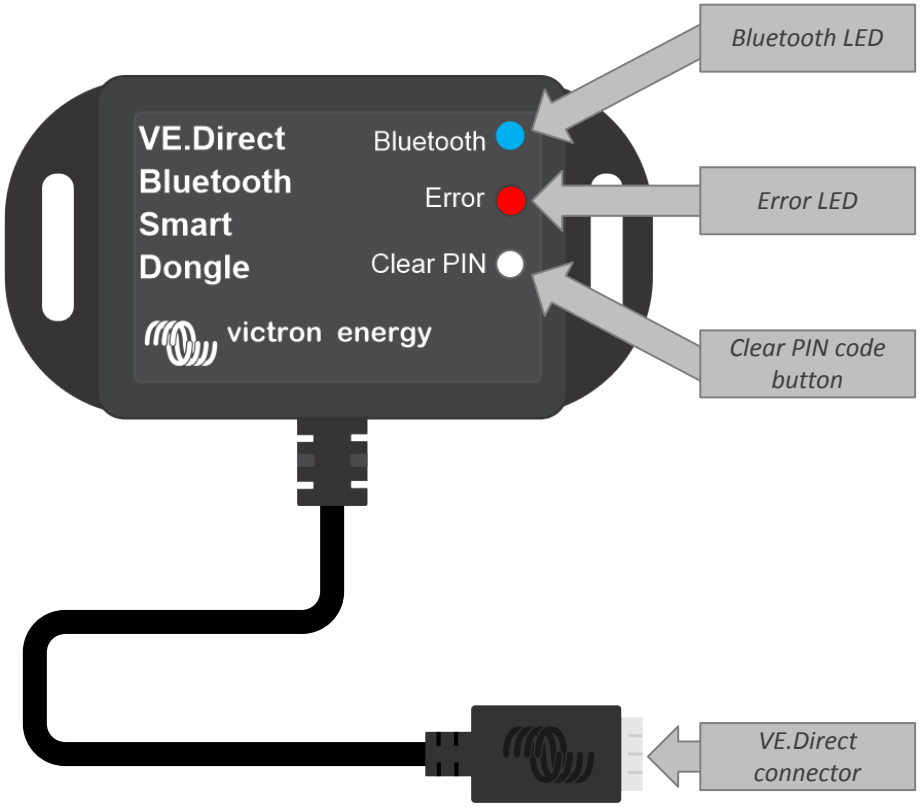
For additional documentation relating to the dongle, like product photos, certificates and more, also see the VE.Direct Bluetooth Smart dongle product page.

The VE.Direct Bluetooth Smart dongle was previously called the VE.Direct to Bluetooth LE dongle. There are no differences, only the name has changed from LE to Smart.

1.2. Features

The main features of the VE.Direct Bluetooth Smart Dongle are:

- View data (such as battery status and solar panel power as well as other useful data) from non-smart devices such as BlueSolar MPPTs, Phoenix Inverter VE.Direct and BMV wirelessly on your iOS or Android mobile devices via our VictronConnect app.
- VE.Smart Networking: wireless communication network between Victron products. See the full VE.Smart Networking manual and also the Limitation chapter [2] for more information.
- Instant Readout: When the VE.Direct Smart dongle is connected to a BlueSolar MPPT, BMV-70x or a Phoenix Inverter VE.Direct, VictronConnect will display the key data of these products on the Device list page without requiring a connection to the product. This includes visual notifications of warnings, alarms, and errors that enable diagnostics at-a-glance. See the VictronConnect manual for more information (requires firmware 2.41 or later).
- Works with iOS, Android and macOS.
- Two status LEDs for Bluetooth and errors.
- Clear PIN code button.



1.3. Limitations

There are a few limitations to be aware of:

- The VE.Direct Bluetooth Smart Dongle is not compatible with Windows PC.
- Synchronised charging is not possible with VE.Smart Networking.
- Stored trends is not supported.
- “Keep SOC” option is not supported for the Battery SOC on reset setting.
- Bluetooth GATT service is not supported.

1.4. Compatible products

The dongle can be connected to almost all Victron products that have a built-in VE.Direct port.

For a full list see the "Compatible Victron Products" section of the VictronConnect manual.

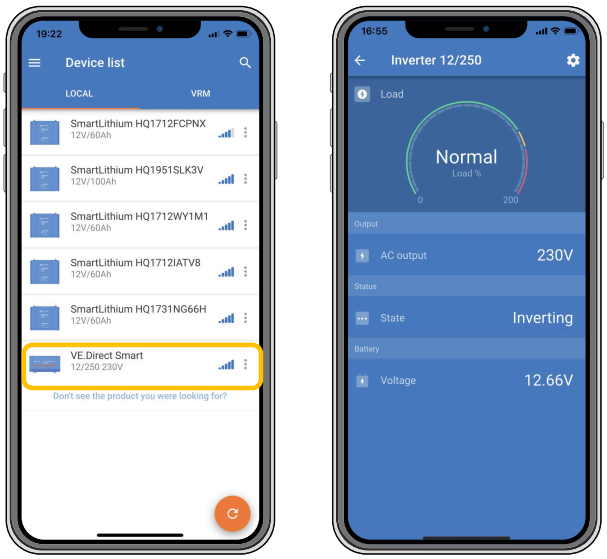
> The dongle cannot be connected to a GX device or to a GlobalLink device

1.5. The VictronConnect App

To connect to the Victron product via the dongle:

- Open the VictronConnect App.
- The Victron app will establish communication with the dongle and the Victron product.
- When the connection is active, the blue Bluetooth LED will stop blinking and turn on solid.
- The product where the dongle is connected to will show up in the device list of the VictronConnect App.
- It will be called VE.Direct smart, together with the name of the connected Victron product. The name can be changed if desired.
- Select "VE.Direct smart" from the VictronConnect App device list.
- The Victron product can now be accessed via the dongle and VictronConnect App.
- Use the VictronConnect App to monitor, make settings or update firmware of the Victron product.

For more information on monitoring and product settings, see the VictronConnect product page and also see the product manual of the Victron product the dongle is connected to.

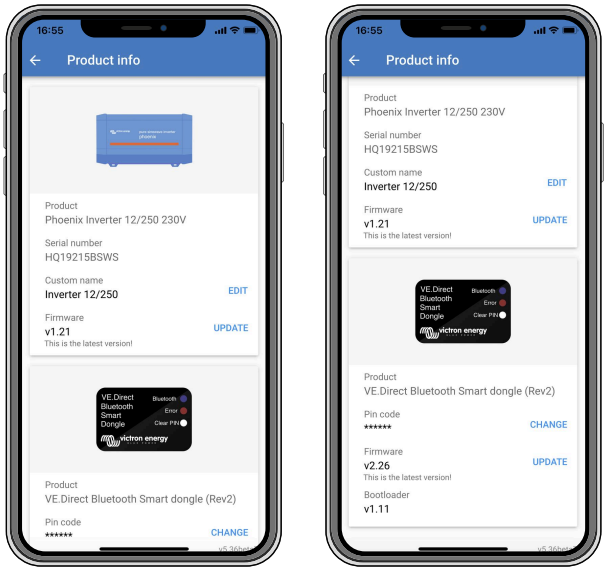


Example of VictronConnect device list and the product page of an inverter

To access the dongle information via the VictronConnect App:

- Click on the cog ⚙ symbol in the top right of the product screen to go to the settings page.

- Click on the 3 dots ⋮ symbol in the top right hand corner of the settings screen.
- Select "Product info" from the pop-up window, the product page will open.
- Scroll down on the product info page to see the dongle information



VictronConnect dongle information page

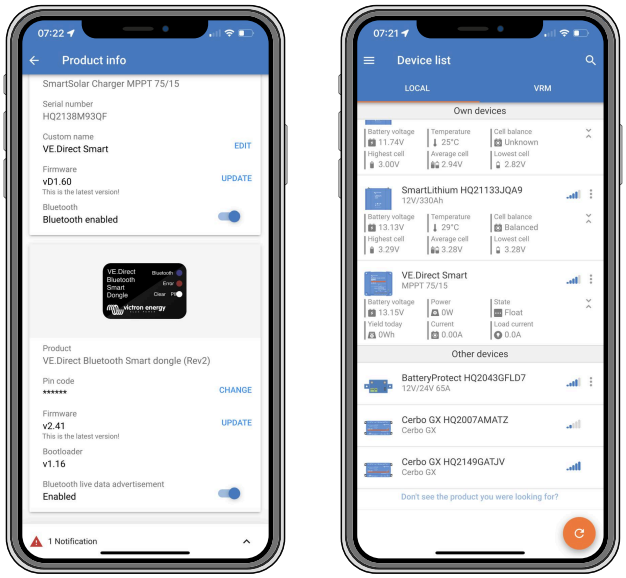
Enable Bluetooth Live Data Advertisement

Bluetooth Live Data Advertisement allows to view data of the connected VE.Direct product instantly and without connecting to it.

If a firmware update to version 2.41 or later of the VE.Direct Bluetooth Smart Dongle is carried out via the VictronConnect app, a pop-up window will appear after the update in which Bluetooth live data advertisement can be activated automatically. The live data then appear immediately in the device overview.

It is also possible to subsequently activate or deactivate Bluetooth live data advertisement. The following steps are required for this:

1. Open the VictronConnect app and tap on the VE.Direct dongle to open it.
2. Go to the Product info page (see the section above: **To access the dongle information via the VictronConnect app**) and check that firmware v2.41 or later is installed.
3. Scroll to the bottom of the page and use the slider to enable/disable Bluetooth live data advertisement.

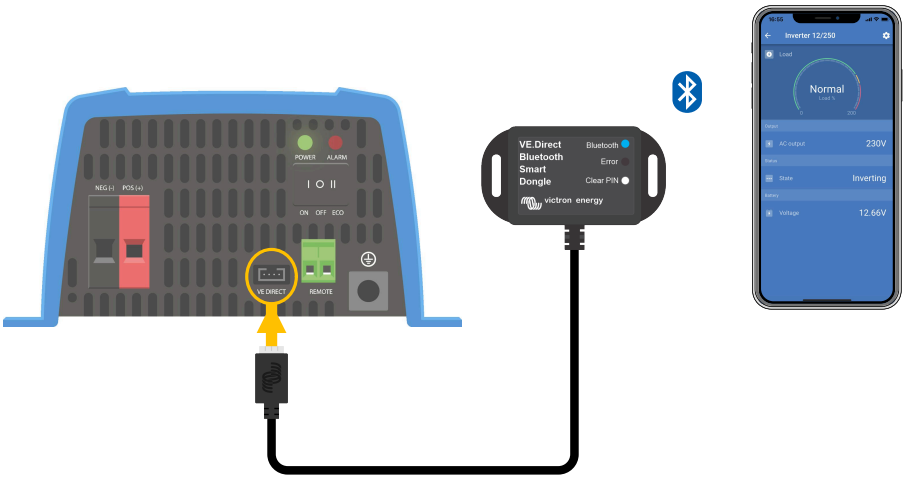


Bluetooth live data advertisement enabled and instant live data on the Device list

2. Installation

- Connect the dongle directly to the VE.Direct port of a compatible Victron product.
- Ensure that the compatible Victron product has been powered up so that the dongle is also powered.
- On power-up, the blue LED will blink, and the red LED will quickly flash. The red LED will give a short flash to confirm that the red LED is functional.
- Connect to the dongle using the VictronConnect app.
- If a firmware update is required, the blue and red LED will blink fast in an alternating fashion. The VictronConnect app will automatically update the firmware.
- If a firmware update is not required, the blue LED will slowly blink and the red LED is off
- Once the VictronConnect App has established a successfully connection with the dongle (and the firmware was successfully updated), the blue LED will be on and the red LED will be off.
- Quite often, the firmware of the connected Victron product will also be updated on first connection.

It is not possible to extend the 1.5m VE.Direct cable.



Connection drawing VE.Direct Bluetooth Smart Dongle

3. Operation

As soon as the Victron product where the dongle is connected to, is powered up, the dongle will also be powered.

The blue Bluetooth LED will be slowly blinking. This means that the dongle is ready for connection.

3.1. LED Status codes Bluetooth module

The Bluetooth status LED (blue) and an the error LED are both associated with the Bluetooth interface.

- On power-up, the blue LED will blink, and the red LED will quickly flash. The red LED will give a short flash to confirm that the red LED is functional.
- When the blue LED is blinking, the Bluetooth interface is ready to be connected to the VictronConnect App.
- When the blue LED stays on, the Bluetooth interface has successfully connected to VictronConnect App via Bluetooth.

See below table for an overview of all possible LED combinations of the Bluetooth module and their meaning.

Table 1. LED indications Bluetooth module

Blue LED	RED LED	Operational state	Connection state	Description
Slow blinking	Off	VE.Direct gateway	Not connected	Ready for connection via Bluetooth
On	Off	VE.Direct gateway	Connected	Bluetooth successfully connected
On	On	VE.Direct gateway	Connected	VE.Direct communication problem. Only the dongle itself can be updated in VictronConnect.
Slow blinking	Slow blinking	VE.Direct gateway	Not connected	VE.Direct communication problem. The dongle will only advertise itself and the attached device will not be visible in VictronConnect.
Double flash	Double flash	VE.Direct gateway	Not connected	Confirmation that the PIN code has been cleared
Fast blinking and alternating with red LED	Fast blinking and alternating with blue LED	Firmware update	Not connected	Red and blue LED are alternating - The firmware needs to be updated
On	Fast blinking	Firmware update	Connected	The firmware is being updated
On	Slow blinking	Firmware update	Programming	The firmware is being updated

3.2. Update firmware

If the blue and red LED are blinking alternating fast this means that the dongle firmware needs to be updated. This usually occurs during installation when the dongle is powered up for the first time.

To update the firmware on first install:

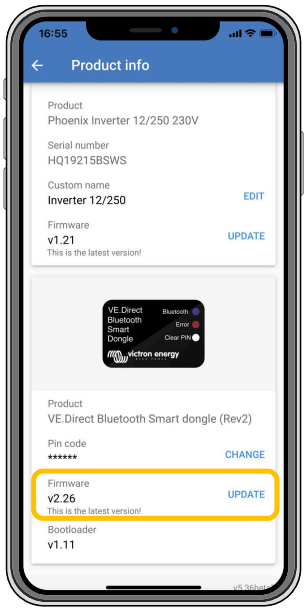
- Connect to the dongle with VictronConnect.
- Once connected VictronConnect will automatically initiate the firmware update.



Screenshot dongle firmware update using VictronConnect

To check the firmware version or to manually update:

- Go to the product info screen as described in previous chapter
- Check the firmware version
- If the latest version is installed, no action is needed
- If there is a newer version available, use the "UPDATE" link to update to the latest version



Screenshot dongle firmware version overview VictronConnect

4. Troubleshooting and Support

For unexpected behaviour or suspected product faults, refer to this chapter.

Start by checking the common issues described here. If the problem persists, contact the point of purchase (Victron dealer or distributor) for technical support.

If you're unsure who to contact or if the point of purchase is unknown, refer to the Victron Energy Support webpage.

4.1. Unable to connect to the dongle

How to fix or diagnose connection problems:

- Make sure that the Victron product where the dongle is connected to, is listed in the "compatible Victron products " chapter in the VictronConnect manual.
- The dongle is powered via the VE.Direct cable connection. Check that the device where the dongle connects to, is powered and the LEDs blink when connecting to the VE.Direct port.
- Make sure you are close enough to the dongle. In open space, a distance of up to approximately 20 meters should work.
- Only one phone or tablet can be connected to a dongle at the same time. Make sure no other devices are connected to the dongle, and try again.
- Try to disconnect the dongle and reconnect it to the same product.
- Try to connect the dongle to a different product (if available).
- Check if VictronConnect can see the device when using a VE.Direct USB cable connected to a PC or android phone.
- Try re-pairing by first removing the pairing from the phone: go to your phone's Settings, then click Bluetooth. Click the (i)-icon next to any “VE.Direct LE” device and click “Forget This Device”. Then, open the VictronConnect App again and pull down the Discovery screen to rediscover products. Set the dongle in pairing mode by clicking the button on the dongle, then click the Victron product in the app's Discovery screen. Confirm the pairing and you should now be connected to the dongle.
- In case a Motorola Moto G 2014 (aka Moto G2) is used: This model has a known issue with VE.Direct Bluetooth Smart dongles with serial number HQ1606 and earlier. If you have such serial number dongle and that phone, contact your Victron supplier for a replacement (newer) dongle.

If these steps were unsuccessful see the troubleshooting section in the VictronConnect manual for more troubleshooting information.

5. Warranty

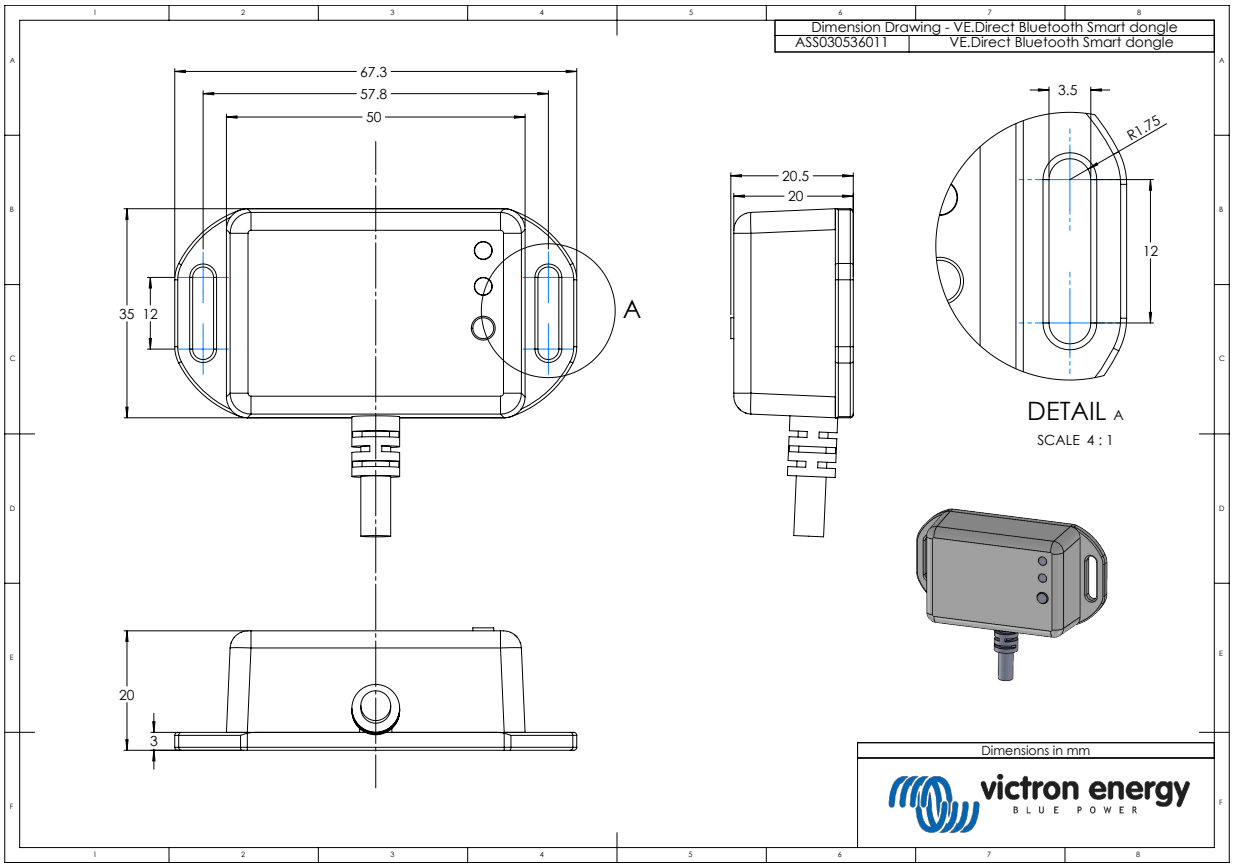
This product has a 5-year limited warranty. This limited warranty covers defects in materials and workmanship in this product and lasts for five years from the date of original purchase of this product. To claim warranty the customer must return the product together with the receipt of purchase to the point of purchase. This limited warranty does not cover damage, deterioration or malfunction resulting from alteration, modification, improper or unreasonable use or misuse, neglect, exposure to excess moisture, fire, improper packing, lightning, power surges, or other acts of nature. This limited warranty does not cover damage, deterioration or malfunction resulting from repairs attempted by anyone unauthorized by Victron Energy to make such repairs. Non-compliance with the instructions in this manual will render the warranty void. Victron Energy is not liable for any consequential damages arising from the use of this product. The maximum liability of Victron Energy under this limited warranty shall not exceed the actual purchase price of the product.

6. Specifications

Table 2. Product specifications VE.Direct Bluetooth Smart Dongle

Specification	Value
Current draw when not connected via Bluetooth	1mA
Current draw when connected via Bluetooth	2.5mA
Length VE.Direct cable	1.5m

6.1. Enclosure dimensions



DECLARATION OF CONFORMITY

CE

COMPANY : Victron Energy B.V.

ADDRESS : De Paal 35
1351 JG Almere
The Netherlands

Declares that the following products:

PRODUCT TYPE : Interfaces

BRAND : Victron Energy

ASS030530000 VE.Direct to USB	ASS030520400 VE.Direct to VE.Can
ASS030130000 MK2-USB	ASS030534000 VE.Direct to Global Remote
ASS030140000 MK3-USB	ASS030700000 VE.Can RJ45 terminator
ASS030532000 CANUSB	ASS030520105 VE.Bus to VE.Can
ASS030520100 VE.Bus to NMEA2000	ASS030550120 Inverting remote on-off cable
ASS030520300 VE.Direct to NMEA2000	ASS030550200 Non inverting remote on-off cable
ASS030520200 VE.Can to NMEA2000 Micro-C	ASS030550300 VE.Direct non inverting remote on-off cable
ASS030120200 MK2.2b (VE.Bus to RS232)	ASS030550400 Skylla-i remote on-off cable
ASS030200000 RS232 to USB converter	CSE000100000 AC Current sensor
ASS030520500 VE.Direct to RS232	ASS030572050 RS485 to USB interface

Are in conformity with the requirements of the following Directives of the European Union:

EMC Directive 2014/30/EU with the following harmonized standards:

EN 55014-1:2017/A11:2020
EN 55014-2:1997/A1:2001/A2:2008
ISO 7637-2:2016

Low Voltage Directive 2014/35/EU with the following harmonized standards:

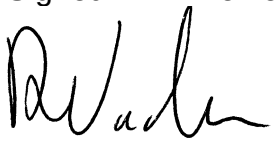
EN-IEC 60335-1:2012/AC:2014/A11:2014/A13:2017/A1:2019/A14:2019/A2:2019
EN-IEC 62109-1:2010

Restriction of the use of certain hazardous substances RoHS (2011/65/EU and 2015/863/EU) with the following harmonized standards:

EN-IEC 63000:2018

CE MARK DATE: July 3rd, 2014

Signed : Reinout Vader



Authority : Managing Director
Date : 29 December 2021

DECLARATION OF CONFORMITY

CE

COMPANY	:	Victron Energy B.V.
ADDRESS	:	De Paal 35 1351 JG Almere The Netherlands

Declares that the following products:

PRODUCT TYPE	:	Dongle
BRAND	:	Victron Energy
MODELS	:	VE.Direct Bluetooth Smart Dongle VE.Bus Smart Dongle

Are in conformity with the requirements of the following Directives of the European Union:

EMC Directive 2014/30/EU with the following harmonized standards:
EN-IEC 61000-6-3:2007/A1:2011/AC:2012
EN-IEC 61000-6-1:2007
EN 55014-1:2017/A11:2020
EN 55014-2:1997/A1:2001/A2:2008
EN 50498:2010

RED Directive 2014/53/EU with the following standards:
CISPR 16-2-3: 2010 (EN 55016-2-3: 2010 and Amd. A1: 2010)
ETSI EN 301 489-1 V2.2.3 and ETSI EN 301 489-17 V3.2.4
ETSI EN 300 328 v2.2.2, Clause 4.3.1.10 and Clause 4.3.1.11

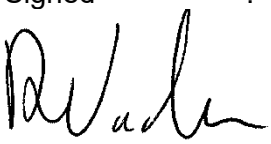
Low Voltage Directive 2014/35/EU with the following harmonized standards:
EN-IEC 60335-1:2012/AC:2014/A11:2014/A13:2017/A1:2019/A14:2019/A2:2019/A15:2021

Restriction of the use of certain hazardous substances RoHS (2011/65/EU and 2015/863/EU) with the following harmonized standards:
EN-IEC 63000:2018

Vehicle Radiated Emissions & Immunity:
ECE R10-5

CE MARK DATE : November 12th, 2018

Signed : Reinout Vader



Authority : Managing Director
Date : 04 July 2022