

# SmartShunt300 A / 500 A / 1000A / 2000A

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**SmartShunt 300 A**



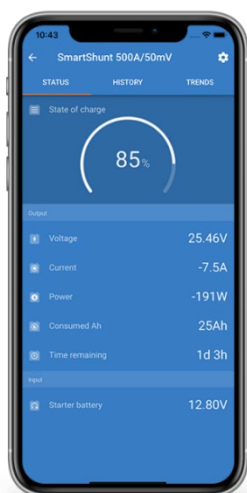
**SmartShunt 500A**



**SmartShunt 100 A**



**SmartShunt 200 A**



The SmartShunt is an all-in-one battery monitor, only without a display. Your phone acts as the display.

The SmartShunt connects via Bluetooth to the VictronConnect app on your phone (or tablet) and you can conveniently read out all monitored battery parameters, like state of charge time to go, historical information and much more.

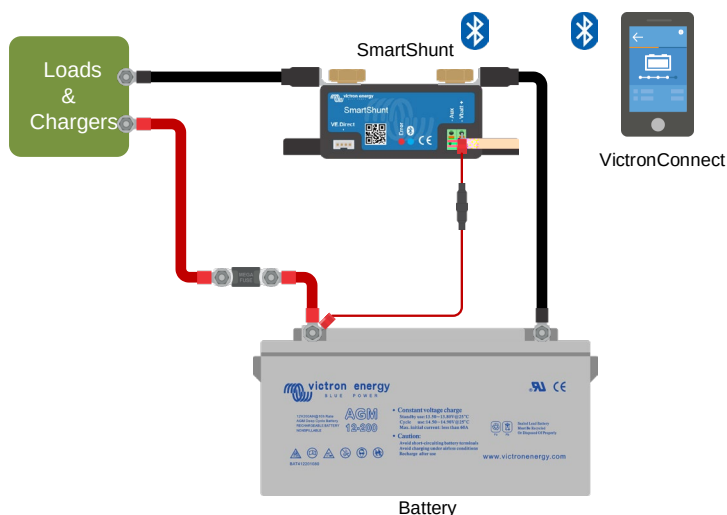
Alternatively, the SmartShunt can be connected and be read by a GX device. Connecting the SmartShunt is made via a VE.Direct cable.

The SmartShunt is a good alternative for a BMV battery monitor, especially for systems where battery monitoring is needed but less wiring and clutter is wanted.

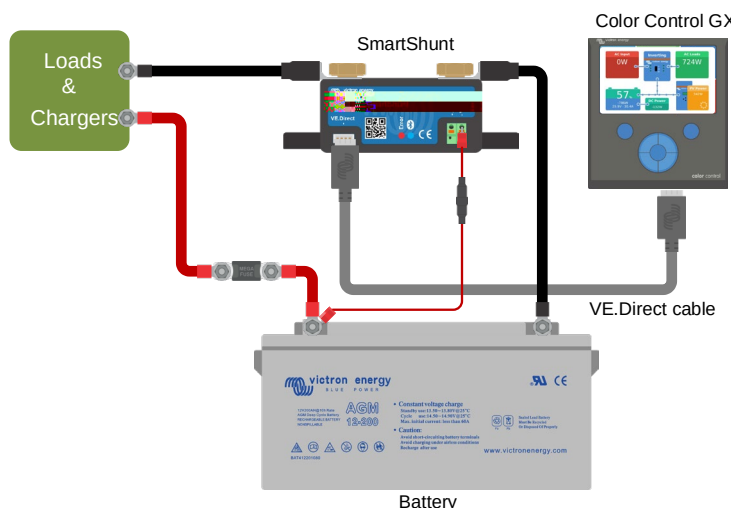
The SmartShunt is equipped with Bluetooth, a VE.Direct port and a connection that can be used to monitor a second battery, for midpoint monitoring, or to connect a temperature sensor.

## Differences compared to BMV12 Battery Monitor

- No programmable visual and audible alarm
- No programmable relay

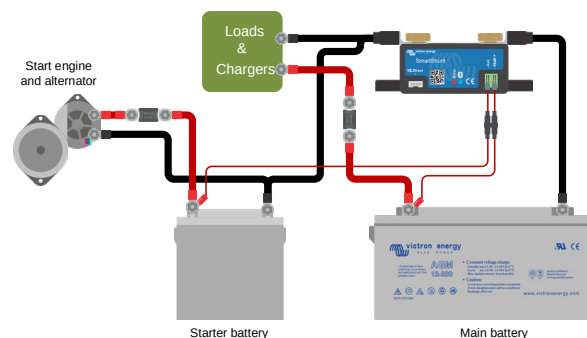


**Basic SmartShunt wiring**

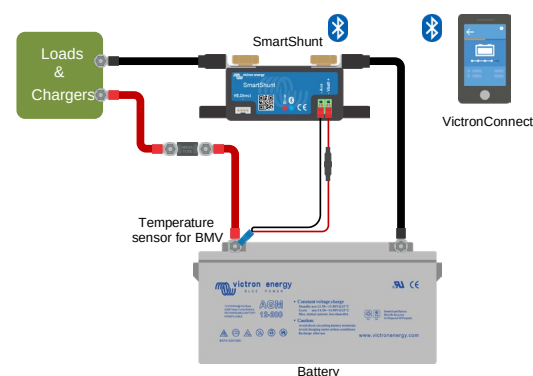


**Connecting a SmartShunt to a GX device**

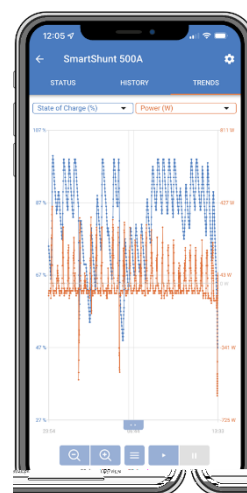
| SmartShunt                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supply voltage range                                            | 6.5 - 70 VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Current draw                                                    | < 1mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Input voltage range, auxiliary battery                          | 6.5 - 70 VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Battery capacity (Ah)                                           | 1 - 9999 Ah                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Operating temperature range                                     | -40 +50°C -40 - 120°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Measures voltage of second battery, or temperature, or midpoint | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Temperature measurement range                                   | -20 +50°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| VEDirect communication port                                     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| RESOLUTION & ACCURACY                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Current                                                         | – 0.01 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Voltage                                                         | – 0.01V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Amp hours                                                       | – 0.1 Ah                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| State of charge (0 100%)                                        | – 0.1%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Time to go                                                      | – 1 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Temperature(if optional temperature sensor connected)           | – 1°C/°F<br>(0 50°C or 30 120°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Accuracy of current measurement                                 | – 0.4%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Offset                                                          | Less than 10 / 10 / 20 / 40mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Accuracy of voltage measurement                                 | – 0.3%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| INSTALLATION & DIMENSIONS                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Dimensions(h x w x d)                                           | 300 A: 44 x 120 x 44 mm<br>500 A: 46 x 120 x 54 mm<br>1000 A: 68 x 168 x 75 mm<br>2000 A: 68 x 168 x 100 mm                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Shunt connection bolts                                          | 300 A: M8<br>500 A, 1000 A, 2000 A: M10 (0.3937 inch)                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Protection category                                             | IP21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| STANDARDS                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Safety                                                          | EN 60335-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Emission / Immunity                                             | ENIEC 61000-1 ENIEC 61000-2<br>ENIEC 61000-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Automotive                                                      | EN 50498                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| ACCESSORIES                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Cables (included)                                               | Two cables with 1 A fuse, for + connection and starter battery or midpoint connection                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Temperature sensor                                              | Optional (ASS000100000)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A note regarding the range of the Bluetooth signal              | The shunt and the electric cables can negatively influence the range of the Bluetooth signal. The resulting range of 10 m is however satisfactory in most cases.<br>The proximity of other electrically conducting elements, such as the metal chassis of a vehicle or seawater around the hull if a boat, may reduce the range of the Bluetooth signal to an unacceptable level. The solution in such a case is to add a VEDirect Bluetooth Dongle (ASS030536011) to the system and to switch off Bluetooth in the SmartShunt. |
| STORED TRENDS                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Data stored                                                     | Battery voltage, Current, State of Charge % as well as the Aux input (Battery temperature, or midpoint deviation, or starter battery voltage).                                                                                                                                                                                                                                                                                                                                                                                  |
| Number of days trends data is stored                            | 46                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



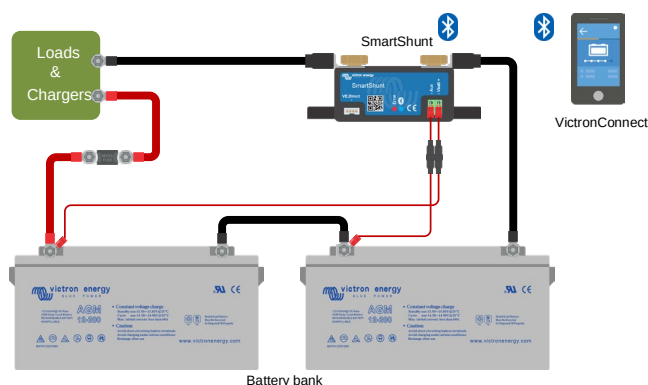
Measuring voltage of the starter battery



Measuring battery temperature



Stored trends for SmartShunt



Measuring battery bank midpoint