

# SmartShunt IP65 500 A / 1000 A / 2000 A

[www.victronenergy.com](http://www.victronenergy.com)

The SmartShunt IP65 is an all-in-one battery monitor, only without a display. Your phone acts as the display.

The SmartShunt IP65 is water resistant and is available in a 500 A, 1000 A or 2000 A version.

The SmartShunt IP65 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 IP65 can be connected and be read by a GX device. Connection to 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, has a VE.Direct port and an auxiliary connection that can be used to monitor a second battery, for midpoint monitoring, or to connect a temperature sensor.

### Differences compared to BMV-712 Battery Monitor

- No visual and audible alarm (alarms are only visible via the VictronConnect app or GX device).
- No programmable relay.
- Waterproof.
- The shunt is attached to the battery monitor unit.



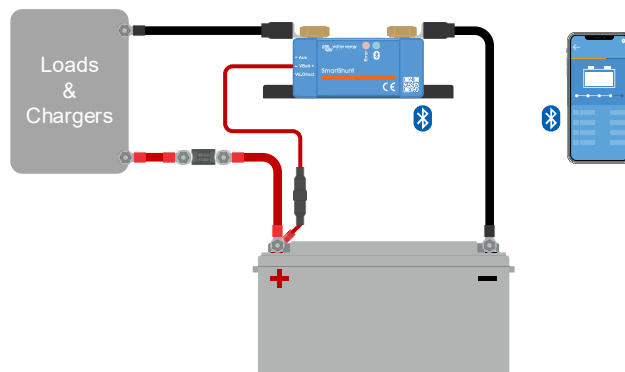
**SmartShunt IP65 500 A**



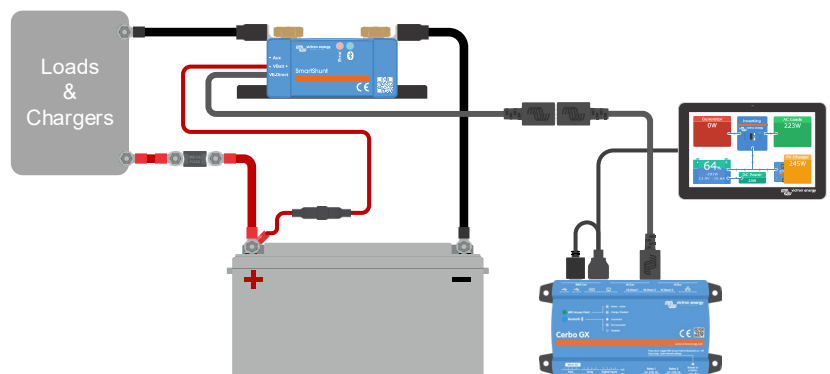
**SmartShunt IP65 1000 A**



**SmartShunt IP65 2000 A**

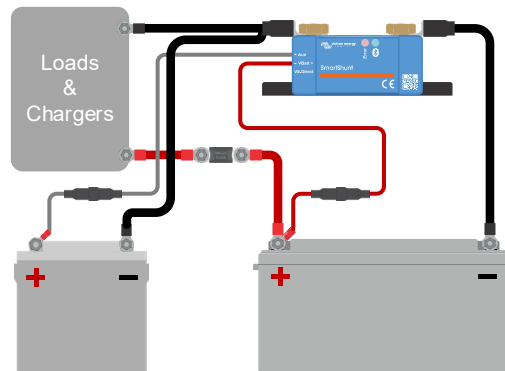


**Basic SmartShunt wiring**

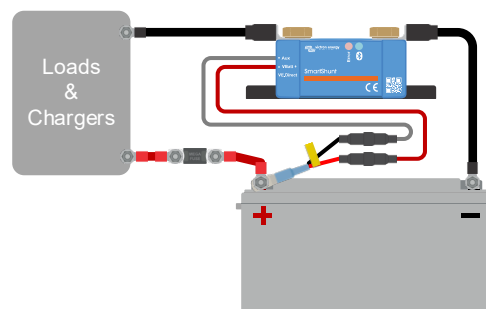


**Connecting a SmartShunt to a GX device**

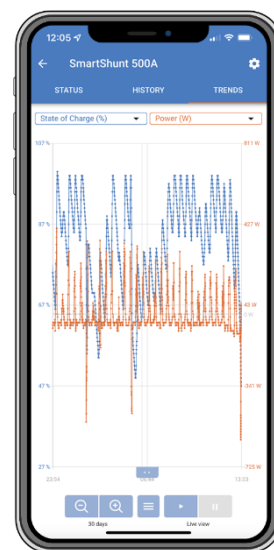
SmartShunt IP65	
Supply voltage range	500 A / 1000 A / 2000 A
Current draw	6.5 - 70 VDC
Input voltage range, auxiliary battery	< 1 mA
Battery capacity (Ah)	6.5 - 70 VDC
Operating temperature range	1 - 9999 Ah
Measures voltage of second battery, or temperature, or midpoint	-40 +50 °C (-40 - 120 °F)
Temperature measurement range	Yes
VE.Direct communication port	-20 +50 °C
	Yes
RESOLUTION & ACCURACY	
Current	± 0.01 A
Voltage	± 0.01 V
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 (0 - 50 °C or 30 - 120 °F)
Accuracy of current measurement	± 0.4 %
Offset	Less than 20 / 40 / 80 mA
Accuracy of voltage measurement	± 0.3 %
INSTALLATION & DIMENSIONS	
Dimensions (h x w x d)	500A: 46 x 120 x 54 mm 1000A: 68 x 168 x 75 mm 2000A: 68 x 168 x 100 mm
Shunt connection bolts	M10 (0.3937 inch)
Protection category	IP65
STANDARDS	
Safety	EN 60335-1
Emission / Immunity	EN-IEC 61000-6-1 EN-IEC 61000-6-2 EN-IEC 61000-6-3
Automotive	EN 50498
Cables	Two 1.5 m cables with 1 A fuse, for '+ ' connection and starter battery or midpoint connection
VE.Direct cable	1.5 m cable with a VE.Direct socket. Note that a (not included) VE.Direct cable is needed to connect a GX device.
Temperature sensor	Optional (ASS000100000)
A note regarding the range of the Bluetooth signal	The shunt and the electric cables do negatively influence the range of the Bluetooth signal. The resulting range of 10-15 meter is however satisfactory in most cases.  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 VE.Direct 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



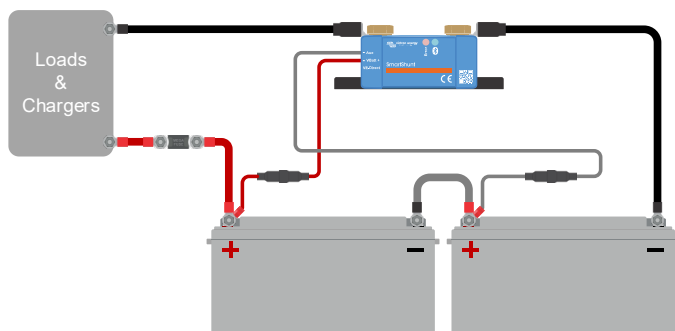
Measuring voltage of the starter battery



Measuring battery temperature



Stored trends for SmartShunt



Measuring battery bank midpoint