

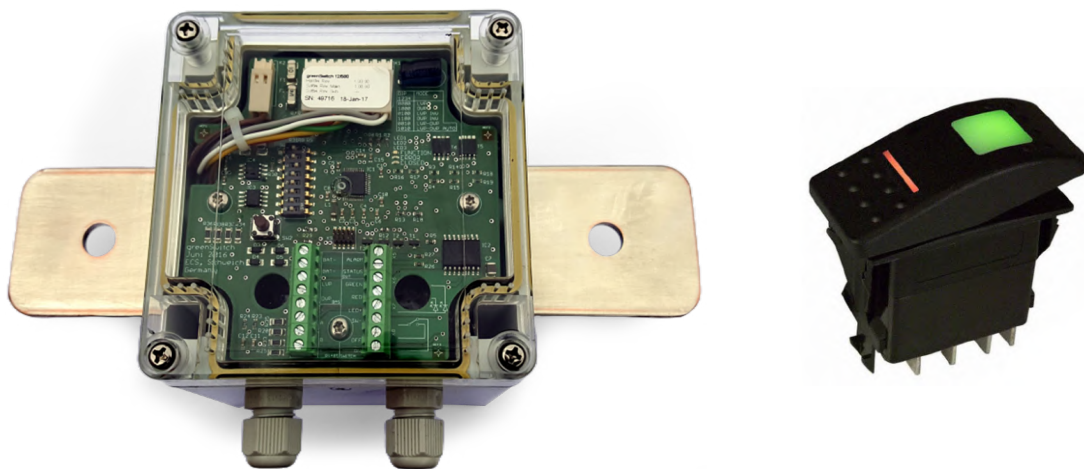


SMART POWER RELAY FOR BATTERY SYSTEMS  
WITH 12 VDC AND 24 VDC

# greenSwitch

**greenSwitch** is a remote-controlled circuit breaker for safely switching large currents. It is controlled either via an operating switch ("Remote Button"), via greenView or via Wifi converter + smartphone.

The special feature of greenSwitch is that a BMS can also be connected directly to protect batteries; it has two inputs (LVP and OVP) for this purpose. However, it can also be used as a normal power relay.



## Product features and advantages

- High current carrying capacity
  - 500 A continuous current
  - 1500 A peak (0,1s / 10 s)
- Low voltage drop
  - Type. 130 mV at 500 A
- Low power consumption
  - 30 to 70 mW at 12 V
- 2 control inputs
  - Deep discharge protection (LVP)
  - Overcharge protection (OVP)
- 2 control outputs for external LEDs
  - Switching status, alarm
- 3 LEDs build in
  - Function, error, switching status
- All data can be accessed by RS485
  - Battery voltage, current, switching status, voltage drop, charging and discharging, temperature
- Energy-saving thanks to the bistable relay
- Microprocessor controlled
- Intelligent Auto mode for automatic restart
- Easy integration - charge and load can be controlled together
- RS485 interface (galvanically isolated) - works with the open Modbus RTU protocol
- Over-temperature protection
- Many possible applications - 5 operating modes can be set
- Waterproof and dustproof housing
- Suitable for all types of batteries

Made in Germany

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Mechanical data	
Dimensions	120 mm x 100 mm x 91.5 mm (case only) 120 mm x 225 mm x 91.5 mm (with rails) Connection hole for M10
Button mounting hole (W x H)	21 x 36.8 mm
Weight	1.45 kg
Cable cross-section Connection terminals	0.2 - 1.5 mm <sup>2</sup>
Cable glands	3 - 6.5 mm
Protection class	IP65
Busbar material type	Copper, tinned
Electrical data	
Operating voltage range	12 V System - 10 V bis 16 V 24 V System - 20 V bis 32 V
Power consumption at 12 V	depending on the operating status 30 - 70 mW
Voltage drop at 500 A	Type. 130 mV
Environmental data	
Ambient temperature at 500 A	-40 °C to +40 °C
Storage temperature	-40 °C to +100 °C
Temperature switch-off	75 °C (+ 5 °C) (default, adjustable)
Output	
Max. ALARM/ STATUS	35V 30 mA, open collector to negative pole
Input	
Deep discharge protection (LVP) high	4.5 – 35 V, with pull-down resistor
Overcharge protection (OVP) high	4.5 – 35 V, with pull-down resistor
Deep discharge protection (LVP) low	0 – 1 V, with pull-down resistor
Overcharge protection (OVP) low	0 – 1 V, with pull-down resistor
RS 485 BUS	
<ul style="list-style-type: none"><li>• Open protocol (Modbus)</li><li>• Up to 147 participants</li><li>• Galvanically isolated</li><li>• Large number of parameters (battery voltage, switching status, voltage drop across the relay, charging and discharging process, temperature, min. and max. values)</li></ul>	
Security	
<ul style="list-style-type: none"><li>• Switching contact is monitored and disconnected in the event of an error</li><li>• Switching contact is disconnected in the event of excessive temperature</li></ul>	



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