

# String Power Booster (SPB) Active Energy Storage Booster



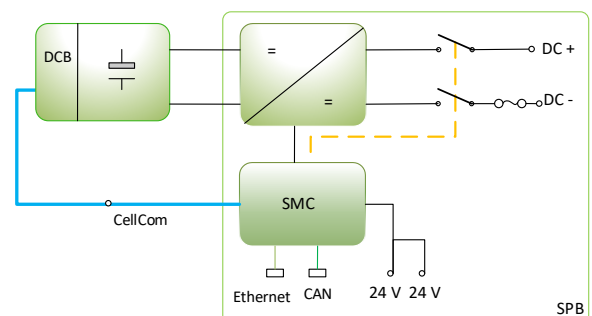
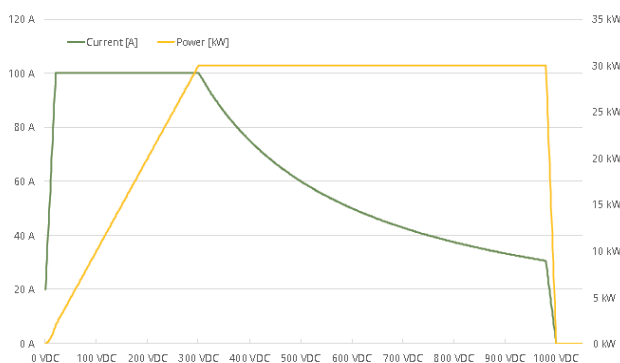
- ✓ Link-up of UltraCap or Li-Battery-Modules to a fixed DC Link
- ✓ Combination of an UC Storage with an existing PV System, fuel cells or other energy sources
- ✓ Active limitation of grid power (peak shaving)

## RPB for an active connection to a DC-Link

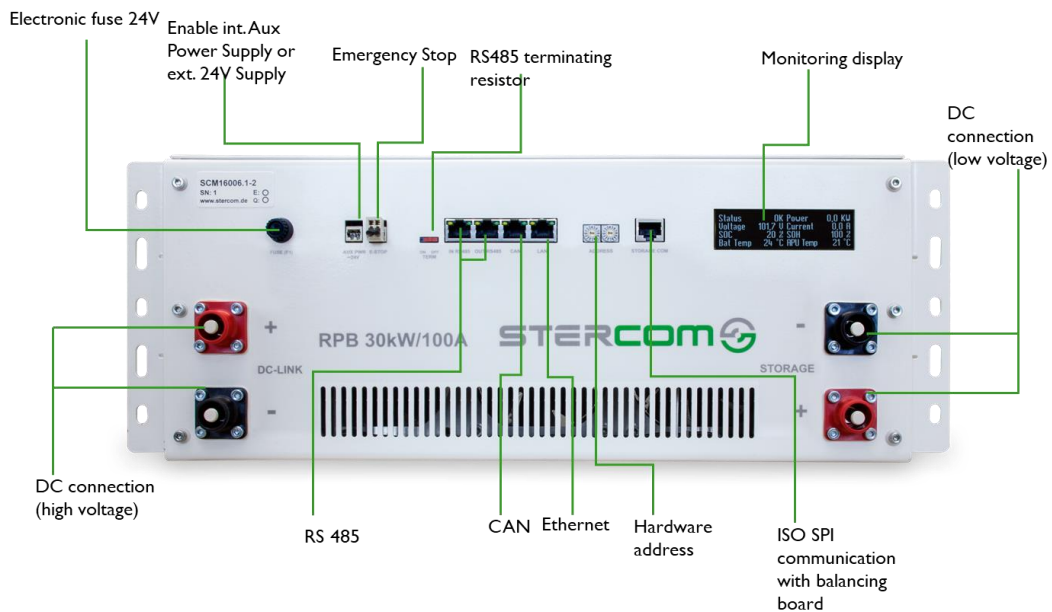
- ✓ 30 kW DC/DC Converter and String Management Controller
- ✓ Bidirectional operation (no galvanic insulation)
- ✓ Charging and discharging controlled via operation modes
- ✓ Plus-Minus disconnection by two contactors
- ✓ Voltage range - UltraCap 0...800 V (max. 900 V), max. 100 A
- ✓ Voltage range - DC-Link 0...800 V (max. 900 V), max. 50 A
- ✓ Interfaces to external control units (CAN, ModBus TCP/IP, Ethernet)
- ✓ Forced cooling via temperature dependent control
- ✓ Fault current monitoring
- ✓ DC Link precharge function
- ✓ Voltage UltraCap < DC-Link

### Options:

- ✓ Energy management for different energy profiles (Loadshaving, Peakshaving, USV)
- ✓ Internal power supply (supplied from DC-Link or UltraCap)
- ✓ SPB without integrated SMC
- ✓ Overlapping voltage ranges (full range buck – boost)



## Connections



## Datasheet

Electrical		
Rated Input Voltage	0 .. 900 V	Batterie Side
Output Voltage	<950 V	DC Link Side
Power/Current	P=30 kW, I=100 A	See Power Curve
Regulation modes	cccv/cccp	Battery side
	Voltage droop mode	DC Link side
Efficiency	>98 %	
Power Supply	+24 V	Optional Self Supply from Battery
Mechanical		
Dimensions	499x484x181 mm	19" 3,5U
Weight	20 kg	
Cooling	Forced Air	
Protection	IP23	
Environmental		
Operation Temperature	-25 °C .. +60 °C	
Humidity	<90 % at 40 °C	
Operation Altitude	<2.000 m	
Acoustic Noise	<55 dBA	
Interfaces		
External Devices	CAN, MODBus, Ethernet	CANOpen or other Standards
Internal (Cluster)	CAN	CANOpen
Remote Access(Diagnostic Studio)	Ethernet	TCP/IP/MQTT
Stercom Battery Management	CellCOM	Isolated SPI
Applicable Standards		
CE, cURus, EAC,CCC		
IEC 62109		
IEC 61800		

## Contact



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