SP series MPPT

60A
80A

SP is a solar charge controller with built in Maximum Power Point Tracking (MPPT) technology, which enables them to increase the output from a solar photovoltaic (PV) array by as much as 30% compared with non-MPPT designs.

SP can optimize the PV's output and eliminate the fluctuation due to shading or temperatures variables. It is a multi-voltage MPPT with built in sophisticated battery charging algorithm, of which could support a wide variety of system designs. Meantime, the data management with 120days of history record can tell user actual performance of thy system.

Thanks to its self cooling design, it is suitable for most rugged environment with dust or bugs. All SP range products can operate at their full rating in ambient temperatures as high as 45 ℃.

MPPT

- For off-grid photovoltaic system up to max 5kW
- Peak efficiency 98%
- Excellent performance at sunrise and low solar insulation levels
- Low self consumption
- Continuous operation at full power up to 45C without de-rating
- Self cooling design for high reliability
- Built in TBB premium II battery charging algorithm for lead acid battery
- Built in auxiliary contact
- Data logging
- Extensive networking and communication capabilities
  - Auxiliary contact
  - RS485 : communication among TBB products or with others
  - CAN: Controller Area Network

		SP60	SP80
Electrical			
Nominal battery voltage		12,24,36,48 or 60Vdc	
PV open circuit voltage (Voc)		150Vdc	
Maximum output current (45℃)		60A	80A
Recommended PV	12Vdc	800W	1000W
	24Vdc	1600W	2000W
	48Vdc	3200W	4000W
	60Vdc	4000W	5000W
Max efficiency (full load)		98%@48Vdc system	
Standby power consumption		<1W	
Charging algorithum		TBB II multiple stages	
Temperature compensation		Automatic, -4mV/C/cell	
Equalization charging		Programmable	
Others			
Communication port		RS485,CAN	
Dry contact		1 programmable	
Data logging		120days of history record - AH, WH, time in float, peak watts, Amps, Solar Array voltage, Max battery voltage, Min Battery voltage and Absorb for eady day along with total accumulated Amp Hours and kW hours of production	
Operating temperature		-40℃ ～ 60℃ (power derated above 45℃)	
Dimension (LxWxH) - mm		370x199x110	
Weight (kgs)		6.5	
Max wire sizes		35mm2	
Protection		IP20	
Cooling		Natural cooling	
Standard		EN55022, EN60950	