Model No.		SP100-20	SP100-40	SP150-60	SP150-80	SP150-120	SP250-70	SP250-100
Electrical								
Nominal battery voltage (VDC)		12,24,or 48		24 or 48				
Maximum charging current (A)		20	40	60	80	120	70	100
Maximum charging power (W)	12VDC	294	588	N/A				
	24VDC	588	1176	1764	2352	3528	2058	2940
	48VDC	1176	2352	3528	4704	7056	4116	5880
Recommended PV (W)	12VDC	300	600	N/A				
	24VDC	600	1200	2250	3000	4500	2700	3750
	48VDC	1200	2400	4500	6000	9000	5400	7500
PV open circuit voltage (Voc) (VDC)		100		150			250	
MPPT voltage range (VDC)		(Vbat+5)~95	(Vbat+5)~90	65~145			65~245	
Max. PV short circuit current (A)		20	Normal operation: 40 PV polarity reversed: 20	40	80			
Max efficiency		98.2% @48Vdc system		98%@48VDC system				
Max MPPT efficiency		99.9%						
Self-consumption (mA)		Less than 1mA@12Vdc/ 3mA @24Vdc/5mA@48Vdc		Less than 60mA@24VDC/37mA @ 48VDC				
Charge voltage 'absorption' (VDC)		Default setting: 14.1/28.2/56.4		Default setting: 28.2/56.4				
Charge voltage 'float' (VDC)		Default setting: 13.5/27/54		Default setting: 27/54				
Charging algorithum		TBB II multiple stages						
Temperature compensation		Default setting: -3mV/℃/cell						
Equalization charging		Programmable						
Other								
Display		LED + LCD						
Communication port		RS485						
Dry contact		30VDC/2A						
Remote on / off		Yes (2 pole connector)						
Data logging		365 days of history record, daily, monthly and total production; Real time figure including solar array voltage, battery voltage, charging current, charging power; Record the daily PV start charging time, absorb to floating transfer time, PV power loss time and etc; Real time fault time and information.						
Storage temperature		-40˚C~70˚C						
Operating temperature		-40℃~70℃ (power derated above 50℃)	-40℃~70℃ (power derated above 30℃)	-25℃~60℃ (power derated above 40℃)				
Humidity		5%~95%, non-condensing						
Altitude		3000m (full rated output up to 2000m)						
Max wire sizes (mm^2)		16		35				
Protection category		IP31		IP21				
Dimension (mm)		205x160x65		327.5x293x116.2				353x293x 116.2
Weight (kg)		1.4		7.2				7.5
Cooling		Natural cooling						Forced fan
Standard		EN61000-6-1, EN61000-6-3, EN62109-1						