

Technical data

Model	SunMAX4860	SunMAX4850	SunMAX4840	SunMAX4830	SunMAX4820	SunMAX
Input Data						
MPP voltage range (Vdc)	55~150 (36V system)					
	70~150 (48V system)					
Max. voltage (Vdc)	160					
Max. input power (36V system) (W)	2750	1875	1500	1125	750	375
Max. input power (48V system) (W)	3000	2500	2000	1500	1000	500
Max. input current (A)	60	50	40	30	20	10
Output Data						
Battery type	Sealed lead acid, vented, Gel, NiCd battery (other types of the batteries also can be defined)					
Floating charge voltage (Vdc)	40.8 (36V system)					
	54.4 (48V system)					
Equalize charging voltage (Vdc)	42.9 (36V system)					
	57.2 (48V system)					
Over charge protection voltage (Vdc)	43.8 (36V system)					
	58.4 (48V system)					
Temperature factor	±0.02%/°C (can be defined)					
Rated output current (A)	60	50	40	30	20	10
Over discharge protection voltage (Vdc)	31.5 (36V system)					
	42 (48V system)					
Max. load current (A)	60	50	40	30	20	10
Max. load power (36V system) (W)	2750	1875	1500	1125	750	375
Max. load current (48V system) (W)	3000	2500	2000	1500	1000	500
General Data						
Charge mode	Maximum power point tracking					
Method	3 stages: fast charge (MPPT), constant voltage, floating charge					
System type	Automatic recognition					
Soft start time (S)	≤10					
Dynamic response recovery time (us)	500					
Conversion efficiency	0.965					
PV modules utilization rate	≥99%					
Self-consumption (W)	<1.5					
Thermal methods	Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low,fan ran slowly or stop; when controller stop v also stop ran					
Noise emission (dBA)	<30 (1m)					

Operating temperature range (°C)	-20~50	
Relative humidity in operation	0~95% (non condensing)	
Max. operating altitude (m)	<6000 (>2000m, derating)	
Ingress protection rating	IP20	
Dimension (D/W/H mm)	242.2/212/86.5	190/200/72
Weight (kg)	3.2	2.5