

Photovoltaic controller with large power

6 kinds of nominal voltage ratings are: 12V, 24V, 48V, 110V, 220V and 500V.

Current: 30A-400A

Performance feature:

1. Microcomputer chip control, parameter of charging, discharging and temperature compensation coefficient can be programmed and set randomly, which can be applied to special requirements of different surrounding
2. LCD dot matrix modular displays Chinese and English operation menu and the user can switch and select
3. LED indication lamp displays every photovoltaic charging status and load on/off status
4. Operating by 9 light touch buttons
5. Control circuit is completely separated from main circuit with high anti-jamming ability
6. Circuit1-18 input control of Solar battery
7. Displaying more than ten parameters such as storage battery voltage, load current, total photovoltaic current, photovoltaic current of each circuit, storage battery temperature, cumulative photovoltaic generation Ah and cumulative load Ah etc
8. Past data statistic display: times of over-charging, over-discharging, overload and short circuit
9. Such parameter as generator start/stop voltage, secondary load on/off voltage, wind turbine unloading/recovery voltage and light sensitive switch voltage of street lamp can be programmed and set
10. The user can respectively set load on/off situation of storage battery over-charging and over-discharging protection
11. Secondary electricity control ability, namely control on main load and secondary load at different voltage & #118alue of storage battery
12. Return difference control function in the charging voltage detector of various circuits, which can prevent switch from resonance
13. Protective function: alarm and protective function such as storage battery over-charging, over-discharging, output overload, short circuit, surge, reverse connection or short circuit on solar battery, reverse connection on storage battery and night anti-charging prevention
14. It can be equipped with RS232/485 joint for remote surveillance and control PC monitoring software can determine real time data, display alarm information, modify control parameter, read past data such as highest and lowest voltage of storage battery, accumulated photovoltaic power generation amount and accumulated load power consumption of every day in 30 days
15. Parameter setting has code protection and the user can modify the code
16. Warning: protection alarm of over-voltage, under-voltage, over-load and short circuit
17. Multi-circuit passive output alarm or control joint: storage battery over-charging and over-discharging, control on diesel engine startup, load shutting-down, controller failure other spare alarm joints can be selected by the user such as flood alarm
18. There are working patterns of gradual stage current restriction pattern, PWM working pattern, button working pattern, light open and light break pattern, light open and time break pattern, clock control pattern, light open and time break and light before dawn pattern, of which the former three patterns are for general load situation the latter four patterns are for street lamp load situation. All delay length and timing clock can be set
19. The user can set the parameter including: balanced charging voltage, float charging voltage, absorption voltage, startup voltage, dynamic pressure stabilization coefficient, static pressure stabilization coefficient, balanced charging time and absorption time.
20. Real time clock function without electricity breaking can display and set the clock
21. Lightning protection: lightning protection devices can be installed at different level according to system requirement
22. Temperature compensation function
23. Flexible combination: stand-alone system, as well as wind/solar hybrid System and combination system of control and invert.



421X488X177mm(4U)



435X482X266mm(6U)



600x600x1200mm (1200 machine cabinet)

12V series

Type		SD1250	SD12100	SD12150
Rated voltage (V)		12		
Rated current Ip (A)		50	100	150
Power of largest solar battery modular (KW)		0.6	1.2	1.8
Input circuit number of solar battery array N		≤ 6	≤ 6	≤ 12
Current of each solar battery Ib(A)		Ib=Ip/N		
Controller Loss (A)		0.1		
Environmental temperature		-20℃~+50℃		
Voltage dropping	Between solar battery and storage battery (V)	0.7		
	Between storage battery and load (V)	0.1		
Mechanical size	Depth *width *height (mm)	4U		6U
Degree of protection		IP20		
Altitude		≤5,500m		

24V series

Type		SD2450	SD24100	SD24150	SD24200
Rated voltage (V)		24			
Rated current Ip (A)		50	100	150	200
Power of largest solar battery modular (kW)		1.2	2.4	3.6	4.8
Input circuit number of solar battery array N		≤6			
Current of each solar battery Ib(A)		Ib=Ip/N			
Environmental temperature		-20℃~+50℃			
Voltage dropping	Between solar battery and storage battery (V)	0.7			
	Between storage battery and load (V)	0.1			
Mechanical size	Depth *width *height (mm)	4U		6U	
Degree of protection		IP20			
Altitude		≤5,500m			

48V series

Type		SD4830	SD4850	SD48100	SD48150
Rated voltage (V)		-48			
Rated current Ip (A)		30	50	100	150
Power of largest solar battery modular (kW)		1.4	2.4	4.8	7.2
Input circuit number of solar battery array N		≤ 6	≤ 6	≤ 6	≤ 12
Current of each solar battery Ib(A)		Ib=Ip/N			
Environmental temperature		-20℃~+50℃			
Voltage dropping	Between solar battery and storage battery (V)	0.7			
	Between storage battery and load (V)	0.1			
Mechanical size	Depth *width *height (mm)	4U		6U	
Degree of protection		IP20			
Altitude		≤5,500m			

Type		SD48200	SD48250	SD48300
Rated voltage (V)		-48		
Rated current Ip (A)		200	250	300
Power of largest solar battery modular (KW)		9.6	12	14.4
Input circuit number of solar battery array N		≤ 12	≤ 18	≤ 18
Current of each solar battery Ib(A)		Ib=Ip/N		

Controller Loss (A)		0.1	
Environmental temperature		-20°C~+50°C	
Voltage dropping	Between solar battery and storage battery (V)	0.7	
	Between storage battery and load (V)	0.05	
Mechanical size	Depth *width *height (mm)	6U	1200
Degree of protection		IP20	
Altitude		≤5,500m	

110V series

Type	SD11050	SD110100	SD110150	SD110200	SD110300
Rated voltage (V)	110				
Rated current Ip (A)	50	100	150	200	300
Power of largest solar battery modular (KW)	5.5	11	11.6	22	33
Input circuit number of solar battery array N	≤ 6	≤6	≤6	≤6	≤12
Current of each solar battery Ib(A)	Ib=Ip/N				
Environmental temperature		-20°C~+50°C			
Voltage dropping	Between solar battery and storage battery (V)	0.7			
	Between storage battery and load (V)	0.1			
Mechanical size	Depth *width *height (mm)	421×488×177mm (4U)	435×482×266mm (6U)	600×600×1,200mm 1200 Cabinet	
Degree of protection		IP20			
Altitude		≤5,500m			

220V series

Type	SD22050	SD220100	SD220150	SD220200	SD220300
Rated voltage (V)	220				
Rated current Ip (A)	50	100	150	200	300
Power of largest solar battery modular (KW)	5.5	11	11.6	22	33
Input circuit number of solar battery array N	≤ 6				≤12
Current of each solar battery Ib(A)	Ib=Ip/N				
Environmental temperature		-20°C~+50°C			
Voltage dropping	Between solar battery and storage battery (V)	0.7			
	Between storage battery and load (V)	0.1			
Mechanical size	Depth *width *height (mm)	421×488×177mm (4U)	435×482×266mm (6U)	600×600×1,200mm 1200 Cabinet	
Degree of protection		IP20			
Altitude		≤5,500m			

500V series

Type	SD50050	SD500100	SD500200
Rated voltage (V)	500		
Rated current Ip (A)	50	100	200
Power of largest solar battery modular (KW)	25	50	100
Input circuit number of solar battery array N	≤ 6	≤ 12	
Current of each solar battery Ib(A)	Ib=Ip/N		
Environmental temperature		-20°C~+50°C	

Voltage dropping	Between solar battery and storage battery (V)	0.7	
	Between storage battery and load (V)	0.1	
Mechanical size	Depth *width *height (mm)	421×488×177mm (4U)	435×482×266mm (6U)
Degree of protection		IP20	
Altitude		≤5,500m	

48V outdoor waterproof wall-mounted

Type	SD4830	SD4860	SD48100	SD48150	SD48200	SD48250	SD48300	SD48400
Rated voltage (V)	DC48V							
Rated current I _p (A)	30	60	100	150	200	250	300	400
Power of largest solar batter modular (kWp)	1.44	2.88	4.8	7.2	9.6	12	14.4	19.2
Input circuit number of solar array N	1	2	4	6			12	1
Maximum current of each array (A)	30	25	34		42	25	34	
Environmental temperature	-20℃~+50℃							
Voltage dropping	Between solar battery and storage battery (V)	0.7						
	Between storage battery and load (V)	0.1						
Mechanical size	Depth *width *height (mm)	400×300×200	700×520×315			900×640×265		
Degree of protection		IP65						
Altitude		≤5,500m						
Note: if the user has special function requirement, photovoltaic controller can be prepared additionally.								