LDSOLAR

Sky Dream Series
PWM Solar Controller

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SKY DREAM
SOLAR CHARGE CONTROLLER

SOLAR CHARGE CONTROLLER

12 Safety Protections

Over Charging protection

Over Discharging protection

Overload protection

Solar Reverse Connected Protection

Battery Reverse Connection protection

Battery Over-Voltage Protection

Over Temperature protection

Thunder Protection

Reverse Flow of Current Protection

Short Circuit Protection

Temperature Compensation

Solar Short Circuit Protection

Design

Auto temperature compensation

The controller adopts asymmetrical design, and the LCD screen is located at the golden section, with a harmonious proportion and beautiful appearance.

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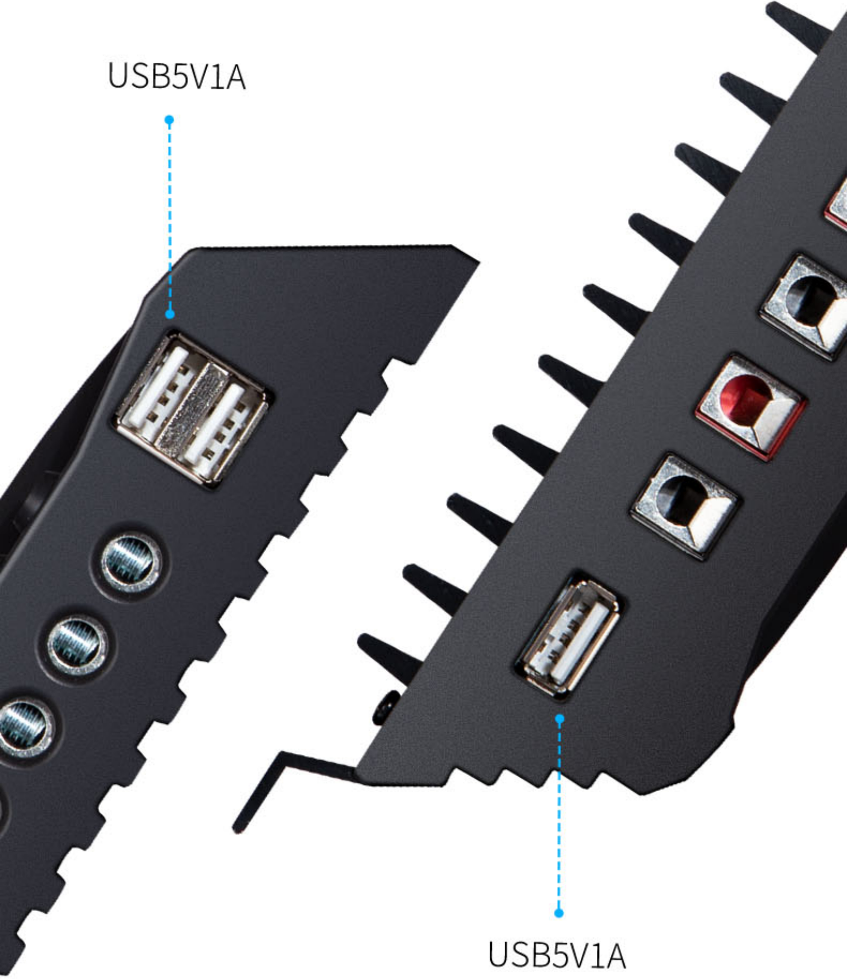
USB

Free USB Charging

Support the maximum 1A charging current, charge your mobile device faster

10A/20A with 2 USB ports,30A/40A with 1 USB port

We also supply 10A/20A with 4USB models

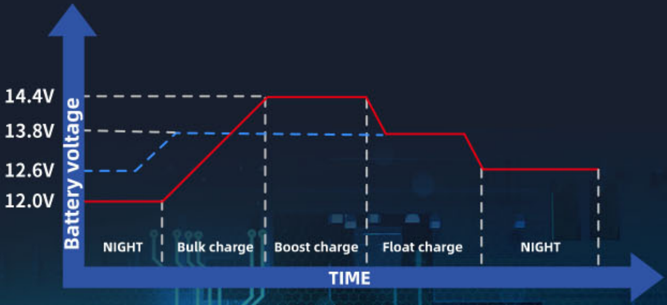


Main control chip

ARM architecture, high-quality 32-bit main control chip, improve charging efficiency comprehensively.

Make your system more stable and efficient, the main control chip adopts STMicroelectronics, and the other components adopt Samsung and Fenghua Hi-tech components to ensure the stability and life of the controller.

The running program of the upgradeable frame structure guarantees the low loss of the controller and makes it more efficient.



Three stage charging

Heat dissipation

Distinctive heat dissipation character

This time, we also made a brand-new upgrade design for the SD series heat dissipation system, and the back MOS tubes are evenly distributed.

While ensuring a stylish and simple appearance, the heat dissipation is further improved.

Back MOS tubes are evenly distributed

Battery

Support lithium battery and multiple battery type

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LiFePO4

LiO2

Sealed

Gel

Flooded

More choice

Choose PWM solar controller that meets your need

Land Dream Series	Sky Dream Series	Oceam Dream Series
LD2420C LDSOLAR		LDSOLAR SOLAR CONTROLLER
8-bit CPU	32-bit CPU	32-bit CPU
USB(Optional)	1A USB*1(10A~40A)	2.4A USB*2/4PCS
Standard connector	Red/Black big connector	Red/Black big connector
LCD	LCD	LCD
Size from 155c㎡	Size from 155c㎡	Size from 198c㎡
Traditional Design	Golden Ratio Design	Simple hide design
10 Safety Protections	12 Safety Protections	12 Safety Protections
PWM 3Stages Charging	PWM 3Stages Charging	PWM 3Stages Charging
/	Over Voltage Protection	Over Voltage Protection
/	Over Temperature Protection	Over Temperature Protection
/	Lithium Battery Supported	Lithium Battery Supported
/	Battery type selected	Battery type selected
No updated program	updated program	updated program
No accessory	Screws	Screwdriver

Parameter

Detailed parameter

Model	SD2410C	SD2420C	SD2430C	SD2430S	SD2440S
System Voltage	12V/24V DC auto				
PV Max Input Voltage	55V				
Self-consumption	<10mA				
Max Charging current	10A	20A	30A	30A	40A
Max Discharging current	10A	20A	20A	30A	40A
Battery type	Sealed(Default)/Gel/Flood/Lithium				
LVD※*	11.0V ADJ 9V...12V ; x2/24V ; x4/48V				
LVR※*	12.6V ADJ 11V...13.5V ; x2/24V ; x4/48V				
Float Voltage※*	13.8V ADJ 13V... 15V ; x2/24V ; M/48V				
Boost Voltage※*	14.4V ADJ 13V...17V ; x2/24 ; x4/48V				
	battery voltage less than 12.6v auto boost 2hours				
Battery Over Voltage ※*	16.5V ; x2/24V ; x4/48V				
Reverse Connection Protection	Yes				
Load Over Current Protection	Yes, each 30s auto restart again				
Controller Over Temperature	Yes				
USB Output	5VDC/1A 2PCS			5VDC/1A 1PC	
Charging Type	PWM				
Charge circuit voltage drop	<=0.25V				
Discharge circuit voltage drop	<=0.1V				
Temperature Consumption#	For 12Vsystem:-24mV /°C ; x2/24V ; x4/48V				
Relative humidity	≤95%, N.C.				

WorkingTemperature	-20°C~+55°C°C(Product can work continuously at full load)				
LCD temperature range	-20°C~+70°C				
Waterproof grade	IP32				
Mounting hole size	Φ5mm				
Terminals	10mm^2/8AWG			16mm^2 /6AWG	
Weight	245g	320g	330g	440g	480g
Overall dimension(mm)	190×108×41.5			200×98×47.5	200×106×41.5

Model	SD2450S	SD2460S	SD4830S	SD4840S	SD4850S	SD4860S
System Voltage	12V/24V DC auto		24V/48V DC auto			
PV Max Input Voltage	55V		100V			
Self-consumption	<10mA					
Max Charging current	50A	60A	30A	40A	50A	60A
Max Discharging current	50A	60A	30A	40A	50A	60A
Battery type	Sealed(Default)/Gel/Flood/Lithium					
LVD※*	11.0V ADJ 9V...12V ; x2/24V ; x4/48V					
LVR※*	12.6V ADJ 11V...13.5V ; x2/24V ; x4/48V					
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Charge circuit voltage drop	<=0.25V					

Discharge circuit voltage drop	<=0.1V					
Temperature Consumption#	For 12Vsystem:-24mV /°C ; x2/24V ; x4/48V					
Relative humidity	≤95%, N.C.					
WorkingTemperature	-20°C~+55°C°C(Product can work continuously at full load)					
LCD temperature range	-20°C~+70°C					
Waterproof grade	IP32					
Mounting hole size	Φ5mm					
Terminals	25mm²/4AWG		16mm² /6AWG		25mm²/4AWG	
Weight	620g	740g	450g	490g	730g	750g
Overall dimension(mm)	200×127×53		200×98 ×47.5	200×106 ×41.5	200×127×53	

Notes: Above the parameters are in 12V system at 25°C, twice in 24V system and quadruple in 48V system.
When battery type is settled to Lithium battery, temperature consumption is 0, unchangeable.
The default value is set based on the lead-acid battery. For other battery type, please refer to the Manual.

Patent

Large-diameter red and black terminals

Customized large-diameter port is more suitable for solar systems that require large-diameter wires to reduce the voltage drop and losses in wires. The shrapnel is designed in the crimping frame to avoid breaking the wire and causing poor contact.

The red and black design allows customers to distinguish positive and negative more intuitively, and good customer experience.

Details

Workmanship
Tightly fitted

In addition to careful design and materials, the quality of the product has a lot to do with the production process.
Details highlight quality.

Professional production factory

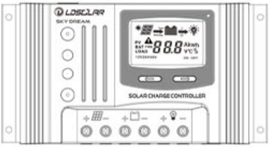
SOLAR CHARGE CONTROLLER

Cover details

Terminals details

Baseplate details

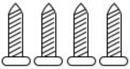
Packing List



Controller
*1PC

USER'S MANUAL

User's Manual
*1PC



Screwdriver
*1PC

After-sale warranty

1.Factory warranty

The PWM controller provides 1.5 years warranty, and the MPPT controller provides 3 years warranty.

2.Factory Commitment

We promise that the solar controllers produced by our company are full power, no fake marks.
We promise that never use old components, "Fake one, Fine 100,000RMB".

3.Worry-free after sales

During the warranty period, non-artificial product failures occur, our company promises to replace new one for free.
After “three-step confirmation " to quickly identify.

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