



# PWM Solar charge controller

## NEW LandStar series



New LandStar series is Epsolar's new generation programmable solar charge controller. All the models adopt aluminum heat sink which enables the reliability in high temperature environments. RS-485 connects to a remote meter or PC for real-time monitoring, custom setting and control etc.



### Application:

- ◆ Solar home system
- ◆ Solar lighting system
- ◆ Solar road signals
- ◆ Solar surveillance
- ◆ Solar RVs and boats
- ◆ Small solar power station

### Model overview:

LS1024B  
LS2024B  
LS3024B  
10A,20A,30A  
12/24V

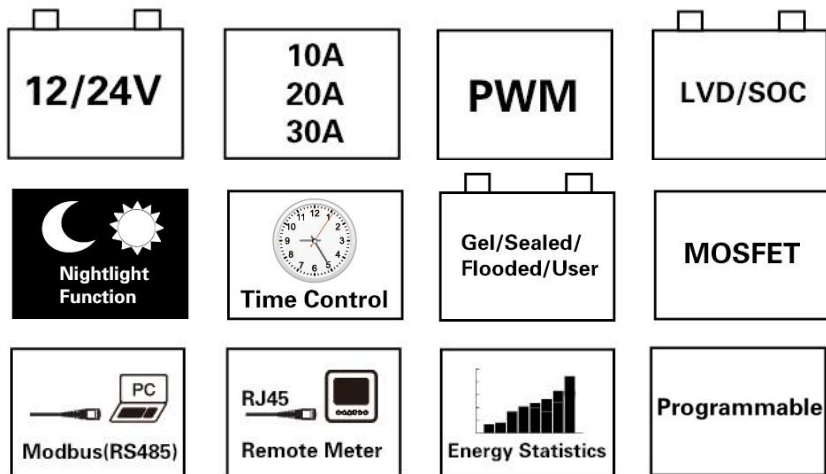


## Features:

- ◆ Three system voltage configuration : 12V, 24V or 12V/24V auto work
- ◆ High efficiency PWM charging with temperature compensation
- ◆ 3 LEDs shows PV charging, battery and load status
- ◆ External temperature sensor interface
- ◆ RS-485 bus communication
- ◆ Open standard Modbus communication protocol
- ◆ Software update function

## More powerful function via MT50 or PC

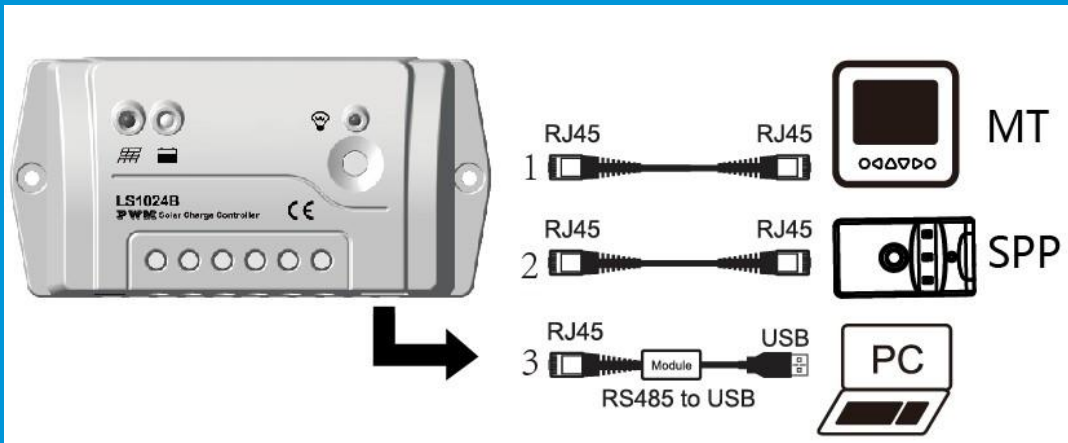
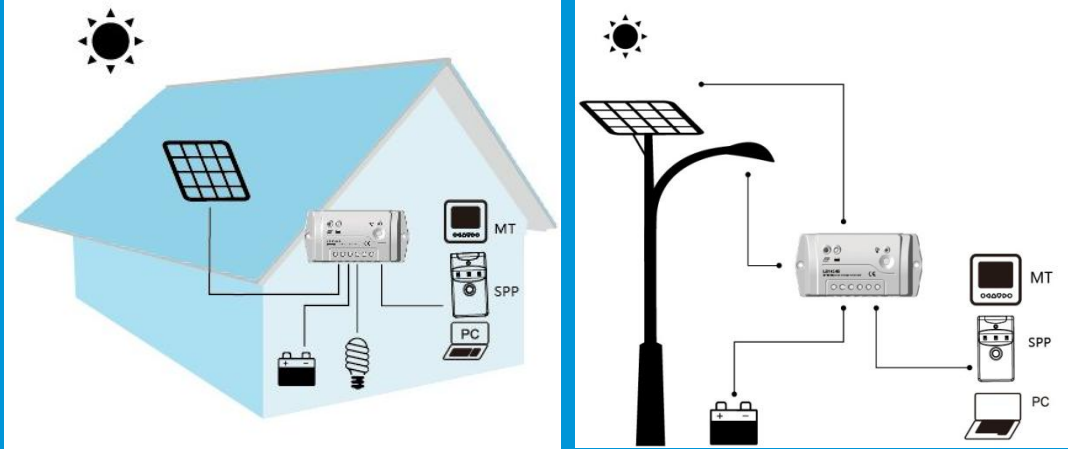
- ◆ Diversified load control modes : Manual, Light ON/OFF, Light ON+ Timer, Time Control
- ◆ Battery type option: Gel, sealed, flooded and USER
- ◆ Real-time monitor
- ◆ Programmable parameters
- ◆ LVD or SOC load disconnect function
- ◆ Energy statistics function



## Electronic protections:

- ◆ PV short circuit
- ◆ PV reverse polarity
- ◆ Battery overcharge
- ◆ Battery Over discharge
- ◆ Battery reverse polarity
- ◆ Load short circuit
- ◆ Load overload
- ◆ Overheating





**Optional accessories :**

<p>Remote meter MT50</p>	<p>Remote temperature sensor RTS300R47K3.81A</p>	<p>Communication cable CC-USB-RS485-150U</p>	<p>Super parameter programmer SPP-01</p>

## PC software:



## Technical specifications :

Model	LS1024B	LS2024B	LS3024B
Nominal system voltage	12 / 24V auto work		
Rated battery current	10A	20A	30A
Rated load current	10A	20A	30A
Maximum battery voltage	50V		
Grounding	Common positive		
Self-consumption	8.4mA(12V), 7.8mA(24V)		
Temp. compensation	-3mV/°C/2V (25°C ref)		
Equalize charging voltage	Sealed: 14.6V, Flooded: 14.8V, User-defined: 9~17V		
Boost charging voltage	Gel: 14.2V, Sealed: 14.4V, Flooded: 14.6V, User-defined: 9~17V		
Float charging voltage	Gel /Sealed /Flooded: 13.8V, User-defined: 9~17V		
Low voltage reconnect voltage	Gel /Sealed /Flooded: 12.6V, User-defined: 9~17V		
Low voltage disconnect voltage	Gel /Sealed /Flooded: 11.1V, User-defined: 9~17V		

\* Technical data for 12V system at 25°C

Model	LS1024B	LS2024B	LS3024B
Dimension	138.6x69.3x37mm	159.6x81.4x47.8mm	200.6x101.3x57mm
Mounting holes	126mm	147x50mm	190x70mm
Terminal	4mm <sup>2</sup>	10mm <sup>2</sup>	10mm <sup>2</sup>
Net weight	0.13kg	0.3kg	0.5kg

Environmental Specification	
Working temp.	-35°C~+55°C
Storage temp.	-35°C~+80°C
Humidity	≤95% (NC)
Enclosure	IP30



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