

## SeaStar series



SS1024R/SS1524R/SS2024R

### SOLAR LIGHT CONTROLLER

Rated Current: 10A, 15A, 20A

System Voltage: 12/24V Auto Work

*Circuit board encapsulation and aluminum case*

*Moisture proof*

*Gel, Sealed and Flooded battery type option*

Load work mode: Dusk to Dawn, Light On+dual timer, Test, ON/OFF

Intelligent timer function with 1-15 hours option

Unique dual timer function, enhance the flexibility of street light system.

- Intelligent System Optimum Control
- High efficient Series PWM charging with temperature compensation
- Compact size
- Use MOSFET as electronic switch, without any mechanical switch
- Digital LED menu, only one key solve all setting simply
- Load status display
- Big terminals and big distance between terminals
- Electronic protection: Overheating, over charging, over discharging, overload, and short circuit
- Reverse polarity protection: Any combination of solar module and battery



## Application :

Ideal for off-grid solar system that loads are normally on or controlled by manual, especially for humid area or boat etc.,

- ★ Solar lighting system
- ★ Solar CCTV system
- ★ Solar traffic system
- ★ Wild automatic detection equipment



## Model selection :

### **SS1024R 10A 12/24V AUTO**

Ideal for off-grid solar system up to 120W, 12V or 270W, 24V

### **SS1524R 15A 12/24V AUTO**

Ideal for off-grid solar system up to 200W, 12V or 400W, 24V

### **SS2024R 20A 12V/24V AUTO**

Ideal for off-grid solar system up to 270W, 12V or 550W.

## Our Advantage :

- ★ Sophisticated R&D has over 20 years research experience's and works in close collaboration with Beihang University.
- ★ Professional technical and service team
- ★ Using world top class electronic components; all the components are industrial grade
- ★ High quality products with reasonable price; the failure rate is less than 2 per1000 pcs
- ★ Practical application in more than 120 countries
- ★ Expected 10 years lifetime
- ★ 2 years warranty

## Electrical parameters

System voltage	12 / 24VDC Auto work	
Battery voltage	6-36V	
Nominal battery current	SS1024R	10A
	SS1524R	15A
	SS2024R	20A
Charge circuit voltage drop	≤0.26V	
Discharge circuit voltage drop	≤0.15V	
Self consumption	≤6mA	

## Battery voltage parameters (TEMPCO -30mV/°C/12V,25°C ref)

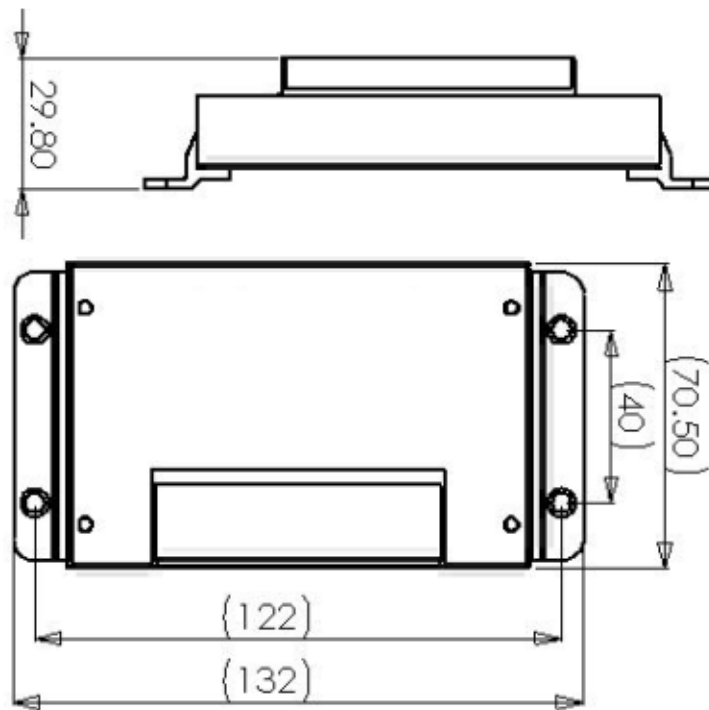
Battery charging setting	Gel	Sealed	Flooded
Over voltage disconnect voltage	16V; x2/24V	16V; x2/24V	16V; x2/24V
Charging limit voltage	15.5V;x2/24V	15.5V;x2/24V	15.5V;x2/24V
Equalize charging voltage	—	14.6V;x2/24V	14.8V;x2/24V
Boost charging voltage	14.2V;x2/24V	14.4V;x2/24V	14.6V;x2/24V
Float charging voltage	13.8V;x2/24V	13.8V;x2/24V	13.8V;x2/24V
Boost reconnect charging voltage	13.2V;x2/24V	13.2V;x2/24V	13.2V;x2/24V
Low voltage reconnect charging voltage	12.6V;x2/24V	12.6V;x2/24V	12.6V;x2/24V
Under voltage warning reconnect voltage	12.2V;x2/24V	12.2V;x2/24V	12.2V;x2/24V
Under voltage warning voltage	12V; x2/24V	12V; x2/24V	12V; x2/24V
Low voltage disconnect voltage	11.1V;x2/24V	11.1V;x2/24V	11.1V;x2/24V
Discharging limit voltage	10.8V;x2/24V	10.8V;x2/24V	10.8V;x2/24V
Equalize duration	—	2hours	2 hours
Boost duration	2 hours	2 hours	2 hours

## Environmental parameters

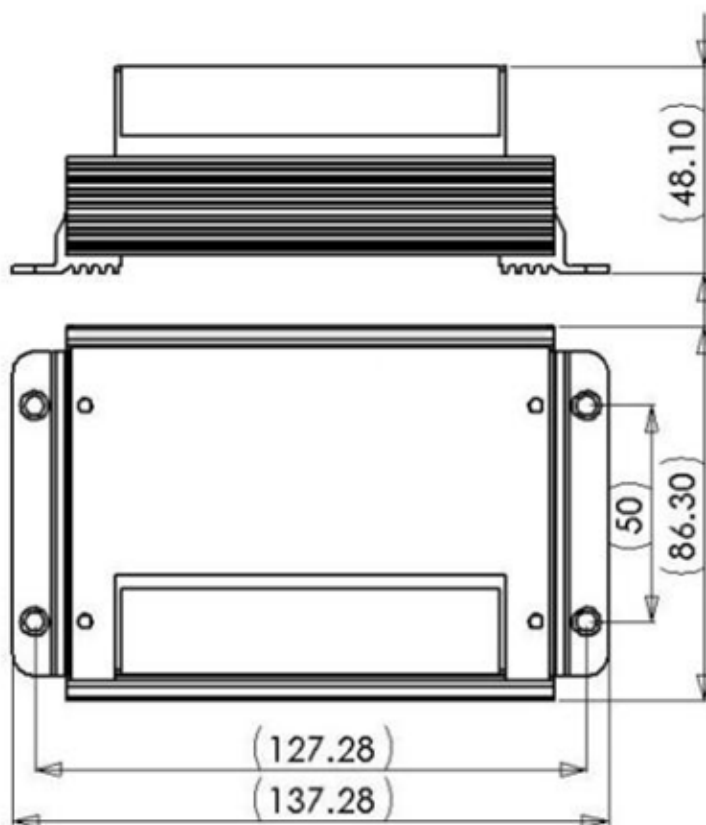
Working temperature	-35°C to +55°C
Storage temperature	-35°C to +80°C
Humidity	10%-90% NC

## Mechanical parameters

	SSI024R	SSI524R/ SS2024R
Overall dimension	132 mm x70.5 mm x30 mm	137 mm x86 mm x48 mm
Mounting dimension	122 mm x 40 mm	127x50mm
Terminal	6mm <sup>2</sup>	10mm <sup>2</sup>
Net weight	0.25kg	0.45kg



**Mechanical Dimension SS1024R**



**Mechanical Dimension SS1524R/SS2024R**