

## 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

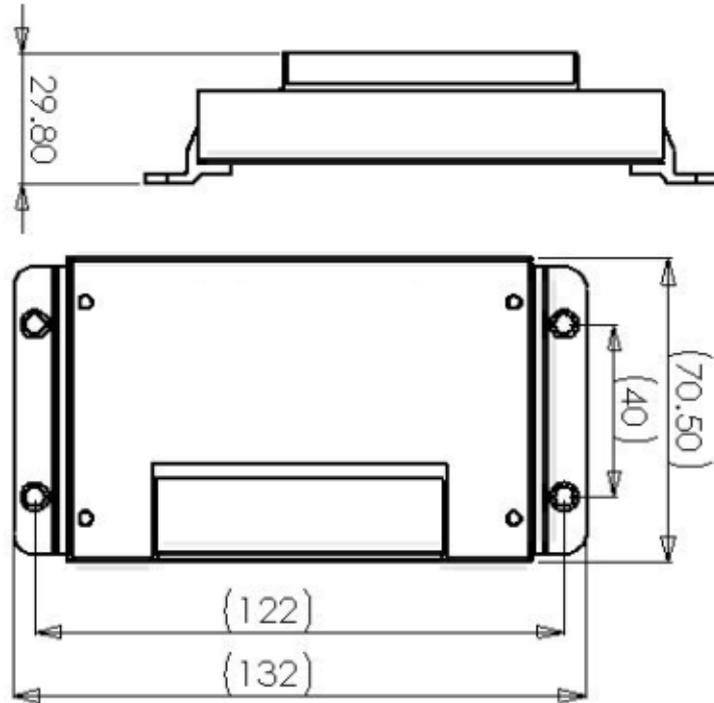
## Electrical parameters

|                                |                      |     |
|--------------------------------|----------------------|-----|
| 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                 |     |

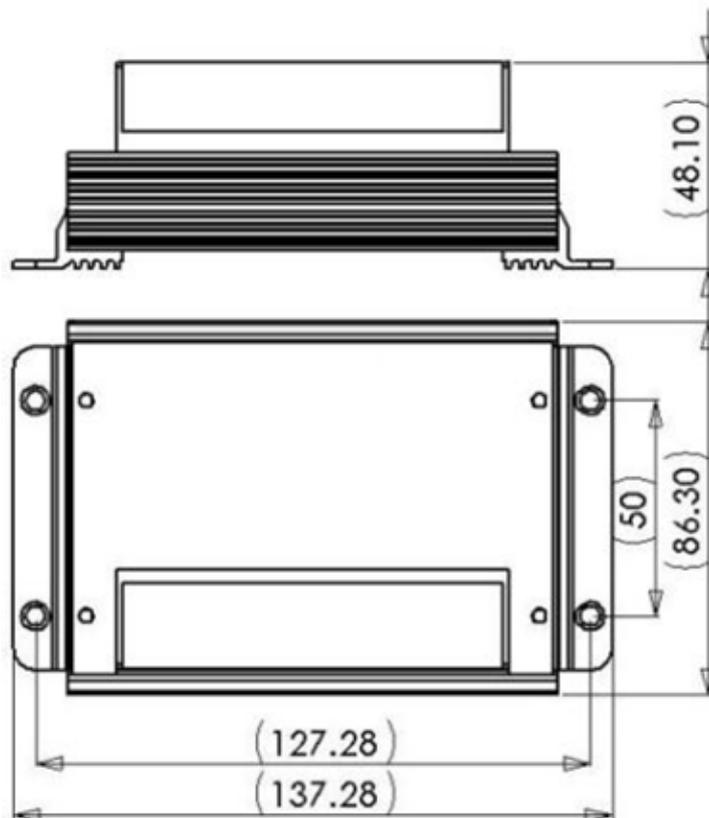
## Battery voltage parameters (TEMPCO -30mV/°C/12V,25°C ref)

| 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 |                | Mechanical parameters | SSI024R                | SSI524R/ SS2024R     |
|--------------------------|----------------|-----------------------|------------------------|----------------------|
| Working temperature      | -35°C to +55°C | Overall dimension     | 132 mm x70.5 mm x30 mm | 137 mm x86 mm x48 mm |
| Storage temperature      | -35°C to +80°C | Mounting dimension    | 122 mm x 40 mm         | 127x50mm             |
| Humidity                 | 10%-90% NC     | Terminal              | 6mm <sup>2</sup>       | 10mm <sup>2</sup>    |
|                          |                | Net weight            | 0.25kg                 | 0.45kg               |



**Mechanical Dimension SS1024R**



**Mechanical Dimension SS1524R/SS2024R**