

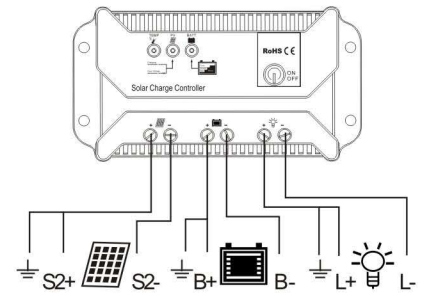
ENS Series PWM Solar Charge Controller

DESCRIPTION

The controller adopts advanced series pulse width modulation(PWM) charging mode. With range of 0-100%, it can charge the battery quickly and stably under any condition of solar photovoltaic system. It will automatically recognize the system rated voltage when start up. If the battery voltage is lower than 18V, it will recognize the system voltage as 12V. If the battery voltage is higher than 18V, it will recognize the system voltage as 24V.

FEATURES

1. 12/24V automatic recognition.
2. High efficient series PWM charging, increase the battery lifetime and improve the solar system performance.
3. Use MOSFET as electronic switch, without any mechanical switch.
4. Gel and Lead Acid Sealed battery type optional.
5. Adopt temperature compensation, correct the charging and discharging parameters automatically and improve the battery lifetime.
6. Electronic protection: overheating, overcharging, over discharging, overload, and short circuit.
7. Reverse polarity protection: Any combination of the solar module and the battery.



SPECIFICATIONS

Model	ENS12/24-05	ENS12/24-10	ENS12/24-15	ENS12/24-20
Nominal system voltage	12/24V DC auto. work			
Rated charge current	5A	10A	15A	20A
Charge circuit voltage drop	≤0.26V			
Discharge circuit voltage drop	≤0.15V			
Self-consumption	≤6mA			
Over voltage disconnect voltage	16V; x 2/24V			
Charging limit voltage	15.5V; x 2/24V			
Over voltage reconnect voltage	15V; x 2/24V			
Equalize charging voltage	14.4V; x 2/24V @ GEL Battery		14V; x 2/24V @ Lead Acid Battery	
Boost charging voltage	14.2V; x 2/24V @ GEL Battery		14.4V; x 2/24V @ Lead Acid Battery	
Floating charging voltage	13.8V; x 2/24V			
Boost reconnect charging voltage	13.2V; x 2/24V			
Low voltage reconnect voltage	12.6V; x 2/24V			
Under voltage warning reconnect voltage	12V; x 2/24V			
Low voltage disconnect voltage	11.1V; x 2/24V			
Discharging limit voltage	10.8V; x 2/24V			
Equalization duration	2 hours			
Boost duration	2 hours			
Temperature compensation coefficient	-30mV/°C/12V (25°C ref) Compensation of equalization, boost, float and low voltage disconnect voltage			
Working temperature	-35°C ~ +80°C			
Storage temperature	-35°C ~ +80°C			
Humidity	10%~90% NC			
Enclose	IP30			
Overall dimension	150 x 82 x 50mm			
Terminal	6mm ²			