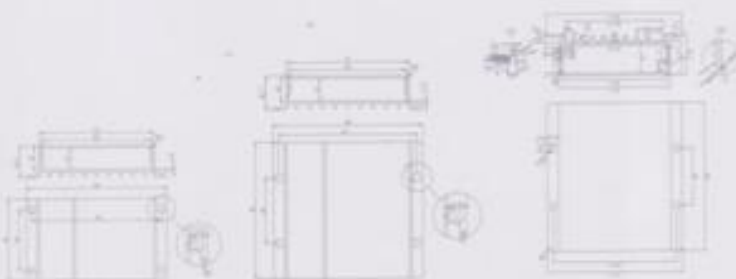


SDN Series PWM Solar Charge controller & LED Dimmer

Product Introduction

SDN Series, is a combination of solar charge controller and LED constant current driver, which is widely used in solar LED lighting. Especially when dimmer function be needed. With feature of high reliability, high efficiency, high-precision, easy to install, adapt to different environment and high/low temperature applications. Control parameters can be setting via RC-3 infrared remote.



Product Family

SDN-40W, SDN-60W, SDN-100W, SDN-150W, SDN-200W

Main Features

- Compatible with Gel, AGM, Li etc battery type.
- 6 Time Periods Load Control (Timer+Dimmer).
- Intelligent system for environmental monitoring, automatic adjustment of power, effectively extending the battery life.
- Automatic 12V/24V Detection
- Three-stage battery charging with PWM
- Motion sensor function (optional).
- Waterproof IP67
- Max output efficient of 96%
- Aluminum housing for better cooling
- 40~+55°C wide temperature range

Protections

- PV reverse polarity/overvoltage alarm protection
- Battery overcharge/over discharge/reverse polarity protection
- Battery temperature too high or too low protection, particularly suitable integrated with lithium-ion battery
- Overload/Short circuit/Open circuit/Over Voltage protection
- Over Temperature protection

Technical Specifications

PWM Solar Charge Controller & LED Dimmer (Waterproof)					
Model	SDN-40W	SDN-60W	SDN-100W	SDN-150W	SDN-200W
System voltage	12/24V Auto				
LED Dimmer parameter					
Max output power	40W 12V&24V	60W 12V&24V	50W12V 100W24V	75W12V 150W24V	100W12V 200W24V
Max.boost output voltage	17~55V/12V (27~55V/24V)				
Max.output current	2000mA	3300mA		6600mA	
LED Dimmer range	0~100%				
Current step	50mA				
Smart mode	4 types save energy mode,2 types motion sensor function(optional)				
Timer	6 Time period output control				
Typical efficiency	92~96%				
Accuracy Current	3%, when take 80% rated power load can reach 1%				
Over Load Capability	105% Output Rater Power				
PV parameter					
Max. PV Output power	170W12V/340W24V	255W12V/510W24V		340W12V/680W24V	
Max. PV Open circuit voltage	55V				
Max. PV current	10A	15A		20A	
Battery parameter					
Type of Battery	AGM	GEL		Li	Custom
Max.Battery voltage	34V				
Main charge voltage*	14.2V	14.4V		Custom	/
Boost charge voltage*	14.6V	14.8V			10~20V
Float charge voltage*	13.6V				10~20V
Equalization charge voltage*	14.6V	14.8V			/
Over Discharge voltage*	11.1V	11.0V			8~20V
Reconnect voltage*	12.6V	13.0V			10~20V
Temp.compensation	4mV/°C/2V				/
Others					
External Communication	RS485/2400pbs, Modbus (optional)				
Self-consumption	<15mA				
low voltage protect	30% Energy				
Reduce output Term.	75°C				
Over Term.	85°C				
Dimensions (LxWxH)	88x53x21	88x83x21		104x91.5x29	
Net weight	150g	250g		400g	
Enclosure	IP67				
Working temperature	-40~+55°C				
Note: *Technical data for 12V system at 25°C, x2 in 24V system					

Note: *Technical data for 12V system at 25°C, x2 in 24V system

Application

