

MPC2415 Series

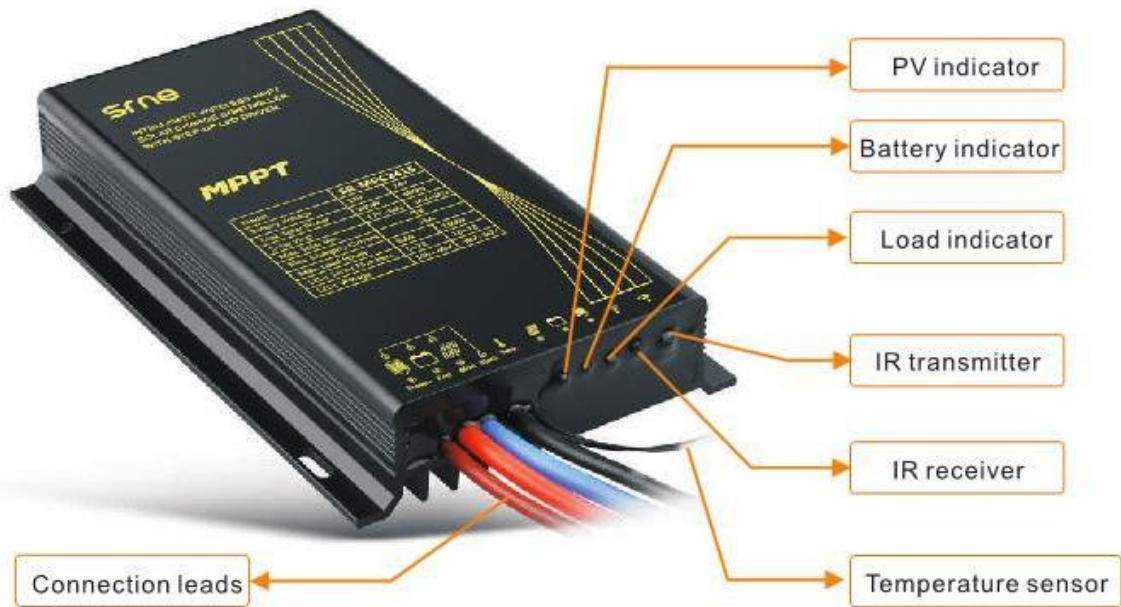
15A 12/24V MPPT Solar Charge Controller



Feature

- *Support both lead acid(Gel included) and lithium battery both for 12V and 24V system.
- *Adopts MPPT charging method, which supports the Voc of solar panel≤75V.
- *With step-up constant current source for output, which can drive 18 LEDs in series.
- *Multi-crest MPPT tech, adapts to the solar panel which is under shadow or partly damaged.
- *4 levels dimming design(including morning lighting).
- *IR remote control: for parameter setting, parameter reading and historical data checking.
- *Auto identify day/night.
- *Very low dormancy loss: 0.06W.
- *Protections: IP68, over charge/over discharge protection, reverse connection protection, reverse charging protection, over load/over current protection, short circuit/open circuit protection, over temperature protection, TVS lightning protection.

Faceplate



Product Detail



Parameters

Parameter Name	Value				Adjustability	Default value
Model	SR-MPC2410		SR-MPC2415			
Supported battery	Lead acid battery(gel included) and lithium battery				√	
Battery voltage	12V	24V	12V	24V	Lithium battery only	
Battery voltage range	7V~36V					
Charge current	10A		15A			
Limited charge current	10A		15A			
Solar panel power	130W	260W	200W	400W		
Solar input voltage	17V~60V	34V~60V	17V~60V	34V~60V		
Max load power	60W	120W	80W	160W		
LED in series(S)	5~18	10~18	5~18	10~18		
Output voltage range	15V~60V	30V~60V	15V~60V	30V~60V		
Circuit efficiency	≤95%	≤97%	≤95%	≤97%		
No-load loss	≤0.55W/normally operation, ≤0.32W/energy saving mode, ≤0.06W/sleep mode					
Voc of solar panel	< 75V					
MPPT tracking efficiency	> 99%					
Limited Charge voltage	15.5V ; ×2/24V					
Over voltage protection	17.0V ; ×2/24V					
Equalizing charge voltage	(Equalizing charge voltage + 0.4V) ; ×2/24V(25°C)					
Equalizing charge time	1 Hour					
Equalizing charge interval	30 Days					
Boost charge voltage	7.5V~15.5V ; ×2/24V(25°C)				√	14.4V
Boost charge time	4 Hour					
Float charge voltage	7.5V~15.5V ; ×2/24V(25°C)				√	13.8V
Temperature compansation	-3.0mV/°C/2V					
Charging prohibited under 0°C	<Yes, No>				√	No
Charging method	<0, 1>				Invalid setting	
Over charge voltage	7.5V~15.5V ; ×2/24V				√	14.6V
Over-charge recover voltage	7.5V~15.5V ; ×2/24V				√	13.6V
Over-discharge recover voltage	7.5V~15.5V ; ×2/24V					12.6V
Over-discharge voltage	7.5V~15.5V ; ×2/24V				√	11.0V
Output current range	70~4200 mA		70~5600 mA		√	900mA
Output current accuracy	±3% or ±30mA					
Light control voltage	5V~15V ; ×2/24V				√	10V
Light open time delay	1~50min					
Light close time delay	1min					
Working temperature	-40°C ~ +60°C ;					
Internal overtemperature protection	70°C ~ 85°C decrease the power step by step, when over 85°C, load or charging will be off.					
Weight	390g		490g			
Product dimension	114×88.3×24.5(mm)		142×88.3×24.5(mm)			
Installation dimension	74×82.3(mm) , Φ3.5		102×82.3(mm) , Φ3.5			
Protection	1.IP68 degree ; 2. PV and Battery reverse connection ; 4. internal overheat ; 5.PV over voltage, short circuit; 6.charge, discharge over load; 7.Anti converse charge at night ; 8.TVS protection to PV. 9. Load short circuit, open circuit ;10. Battery open circuit					

Remark: 1.The real mini output voltage is higher than currently battery voltage about 1V.
2. The real mini output voltage is limited by mini output current 70mA and mini output voltage.