

# MCC10/15 (10A/15A)

MPPT Solar Controller + LED driver + Built-in Timer + IRDA



## Features:

- ▲ MPPT efficiency  $\geq 99.9\%$ .
- ▲ Parameter could be set and viewed through Wireless infrared communication.
- ▲ 3 stage charge: MPPT charge, Equalization charge and float charge.
- ▲ 3 Stage **Linear Dimming**: 100%, 50%, 30%;
- ▲ Battery charge efficiency is up to 96% by Synchronous rectification.
- ▲ Self Consumption  $\leq 4\text{mA}$
- ▲ Protect function: reverse polarity (battery or solar panel), over-charge, over-discharge, over load, short circuit, TVS lightening
- ▲ Waterproof Degree: IP68.
- ▲ Use Non-aluminum electrolytic capacitor, extend life time to 25years.

This controller design for solar LED lamp system, solar street light system etc.

- MPPT efficiency  $\geq 99.9\%$ , system efficiency is up to 98%, Maximizes solar panel power output & reduces system costs.
- Infrared wireless communications connect with a hand-held remote control easy for installation.
- Intelligent energy management of battery ensures that the battery charge & discharge in shallow state which significantly extend the battery life.

Requirements on your LED

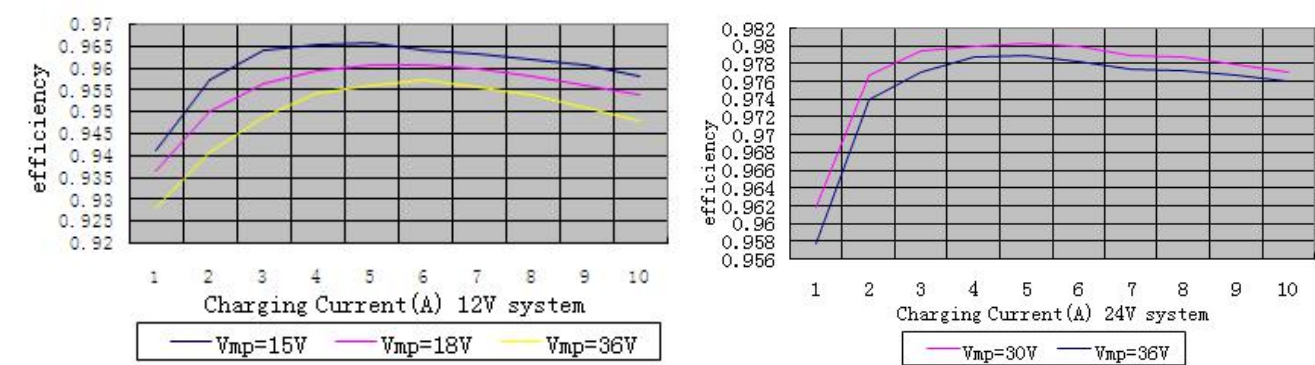
System voltage	Recommended LED bead series connection Qty.(n)	Load output voltage(Vout)	Load output power (PLed)
12V	$18 \geq n \geq 6$	$60V \geq Vout \geq 16V$	$PLed \leq 30W/60W$
24V	$18 \geq n \geq 10$	$60V \geq Vout \geq 32V$	$PLed \leq 60W/120W$

**Note:** before and after slash “/” stands for 10A and 15A.

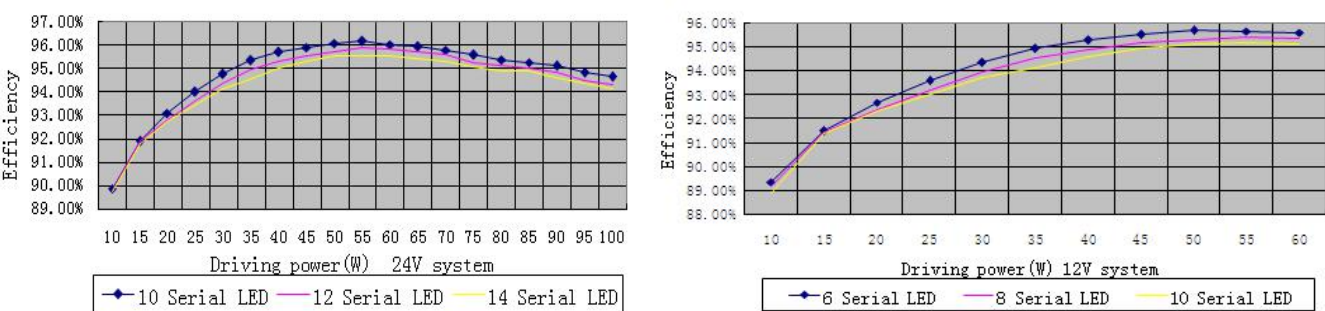
Technical Parameters:

Model NO.	MCC10	MCC15
System Voltage	12/24V Auto Recognition	
Max. Charge / Load Current	10A	15A
LED Driver Current	0~4000mA	
LED Driver Voltage	16~60V(12V), 32V~60V(24V)	
LED Series NO.	6~18(12V), 10~18(24V)	
Max. LED Driver Power	80W / 12V; 160W / 24V	
Max. Efficiency	96%	
Float Charge	13.6(12V), 27.2(24V) (25 °C)	
Equalization Charge	14.4(12V), 28.8(24V)	
Load Disconnect	11/22V	
Load Reconnect	12/24V	
Over-charge Protection	16/32V	
Max. Solar Open-circuit Voltage	60V	
Temperature Compensation	-4mV/°C · 2V	
Self-consumption	≤1mA (12V), ≤2mA (24V)	
Day/night Detect Voltage	Day: >6V; night: <5V	
Day/night Detect Delay	3 min	
Operating Temperature	-30 ~ +60°C	
Max. Altitude	4000m above sea level	
Dimensions	100*82*20mm	130*82*20mm
Weight	260g	350g
Protection Degree	IP68 (1.5m, 72h)	

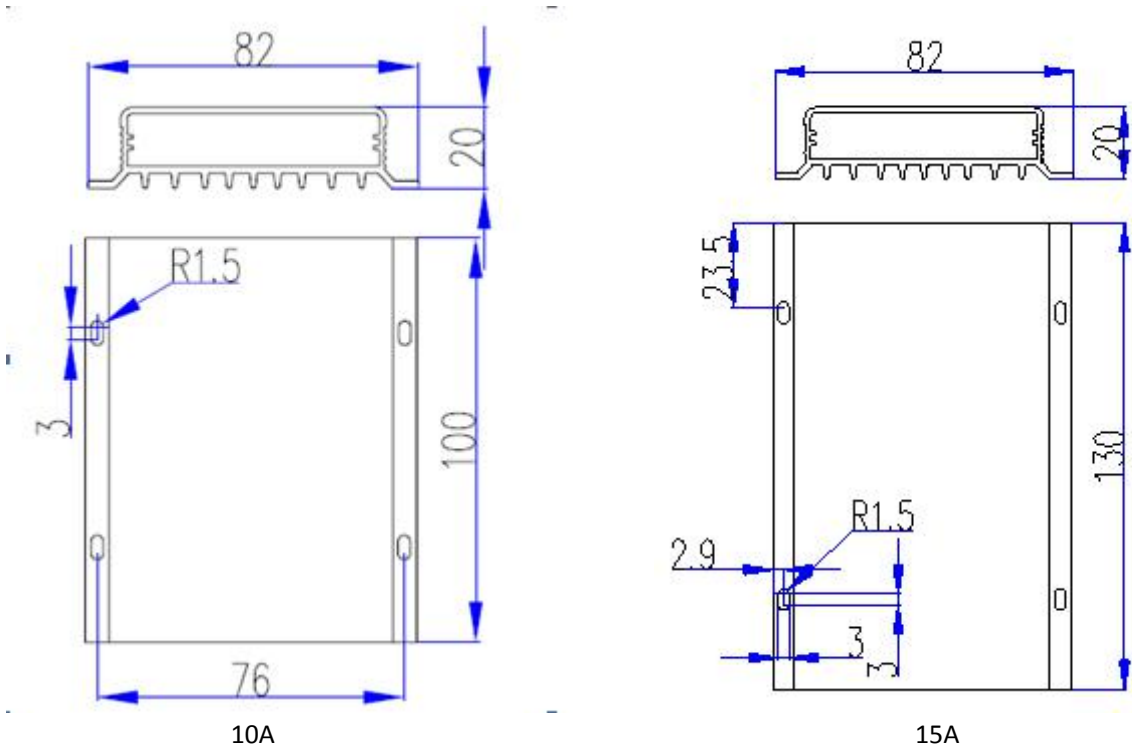
MPPT Efficiency:



LED Driver Efficiency:



Size:



Monitor display:

