

MPPT2075-DCHG

**MPPT Solar charge controller
with LED driver built-in**



MPPT

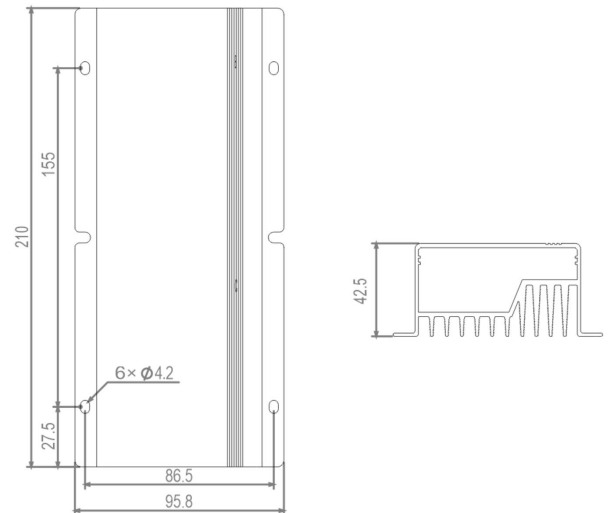


IP67



Dimensions

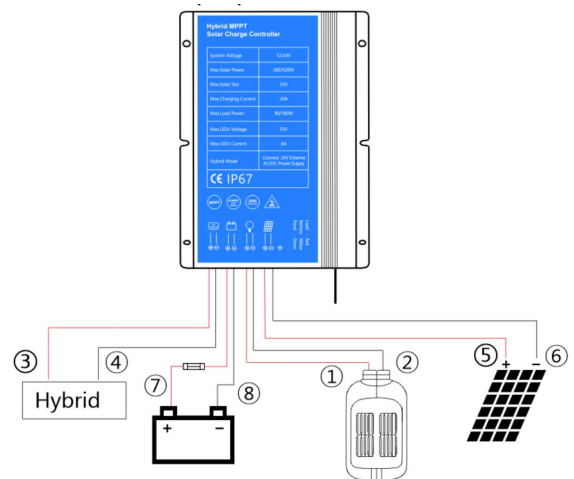
Unit:mm



Description of Function

This series solar controller is programmable and especially for boost mode LED solar street light system. It includes constant current driver function. The charging efficiency is about 20% higher than the traditional PWM controller, which can drop the cost of the whole system. When battery voltage is low, the controller will transfer to AC/DC converter, to keep the lamp continue lighting.

- Innovative Maximum Power Point Tracking(MPPT) technology, tracking efficiency >99.9%
- High charge conversion efficiency of up to 97.5%, discharge conversion efficiency up to 96.5%
- Solar power generation and municipal power supply complement each other to improve power supply guarantee rate.
- Output constant current (output current can be set)
- 5 stages time and dimming can be adjusted
- Can read parameters and running status
- If battery voltage is low, it can be set to dimming
- Dimming start voltage and percentage can be set
- Battery charging protection
- AGM, Liquid, GEL and Lithium battery for selection
- Automatic temp. compensation (AGM/Liquid/GEL)
- Four stages charge way: MPPT, boost, equalization, floatAGM/Liquid/GEL)
- Transportation mode(Lithium)
- Automatic power balance 365 mode, 365 days can be lit(Lithium)
- Day/Night threshold can adjust automatically
- When BMS power off because of LVD, it can activate the system(Lithium)
- IP67, Strong and durable aluminum case
- Full automatic electronic protect function



Technical Data

	Item	MPPT2075-DCHG	
Battery Parameters	Battery Type	Liquid, GEL and AGM	Lithium
	System Voltage	12V/24V automatical recognition	—
	Max Charging Current	20A	
	MPPT Charging Voltage	before boost, equalization or CVT voltage <Charging voltage target	
	Boost Voltage	14.5/29.0V @25°C	—
	Equalization Voltage	14.8/29.6V @25°C (Liquid, AGM)	—
	Float Voltage	13.7/27.4V @25°C	—
	Charging target volt.	—	10.0~32.0V (Programmable)
	Charging recovery volt.	—	9.2~31.8V (Programmable)
	Low Volt. Disconnect	10.8~11.8V/21.6~23.6V (Programmable)	9.0~30.0V (Programmable)
	Reconnect Voltage	11.4~12.8V/22.8~25.6V (Programmable)	9.6~31.0V (Programmable)
	Overcharge Protect	15.5/31.0V	—
	0°C Charging protection	—	Yes, No, Slow (Programmable)
	Max volt on Bat. terminal	35V	
	Temp. Compensation	-4.17mV/K per cell (Boost, Equalization), -3.33mV/K per cell (Float)	—
Panel Parameters	Max volt on PV terminal	55V *1	
	Max input power	260/520W	70W*#(3~8)
	Dusk/Dawn detect volt.	3.0~20.0V (Programmable)	
	Day/Night delay time	0~30min((Programmable)	
	MPPT tracking range	(Battery Voltage +1.0V) ~Voc*0.9 *2	
AC/DC	Max input Power	150W/24V	—
Load Parameters	Output Power	10~90W/20~180W	5~(22.5W*#(4~8))
	Current setting range	0.15~6.0A (Programmable)	
	Min current	100mA (Dimming)	
	Output Voltage	20~55V/30~55V	20~55V
	Current precision	±2%	
	Auto Dimming	0~100% (Programmable)	
	Dimming	—	Yes, No, 365(Programmable)
	Voltage of start dimming	11.8~12.5V/23.6~25.0V (Programmable)	10.0~CVT(Programmable)
	Dimming percentage	1~20% (Programmable)	
System Parameters	Max tracking efficiency	> 99.9%	
	Max charge conversion	97.5%	
	Max LED driver efficiency	96.5%	
	Self consumption	8~16mA	
	Dimensions	210* 95.8 * 42.5mm	
	Ambient temperature	-35~+60°C	
	Ambient humidity	0~100%RH	
	Protection degree	IP67	
	Max Altitude	4000m	

*1.This value represents the maximum voltage of the solar panel at the minimum operating ambient temperature

*2.Voc means the open circuit voltage of the solar panel.