

MPPT-DC series

MPPT Solar charge controller



MPPT2050-DC32Li



MPPT3050-DC32LiG



MPPT

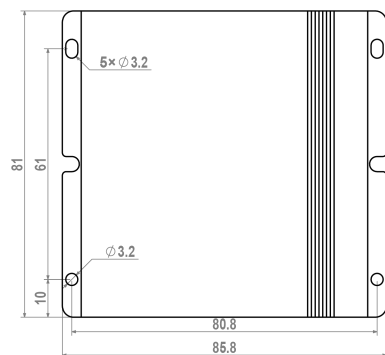
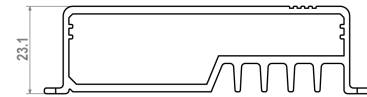


IP67

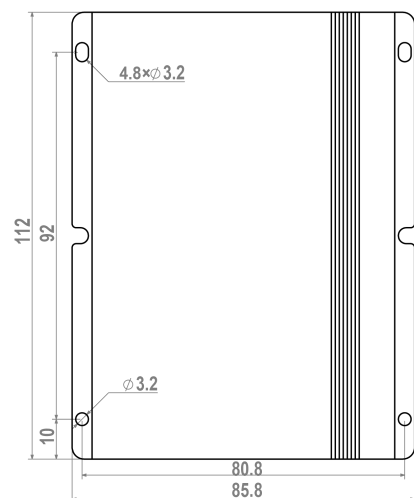
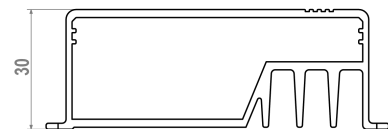


Dimensions

Unit:mm



MPPT2050-DC32Li



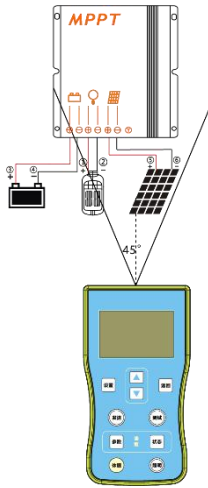
MPPT3050-DC32LiG

Description of Function

MPPT-DC series intelligent MPPT 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.

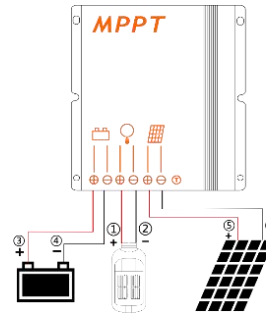
- 5 stages time and dimming can be adjusted
- AGM, Liquid, GEL and Lithium battery for selection
- 0°C Charging Protection(Lithium)
- Remote Unit to configure, with LCD display
- Infrared sensor and microwave sensor are optional.
- Innovative Max Power Point Tracking(MPPT) technology, tracking efficiency >99.9%
- Full digital technology, high charge conversion efficiency up to 97.5%, discharge conversion efficiency up to 96.5%
- Can output constant current (output current can be set)
- 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
- Day/Night threshold can adjust automatically
- When BMS power off because of LVD, it can activate the system automatically
- External temperature sensor, automatic temperature compensation(AGM, Liquid and GEL)
- Four stages charge way: MPPT, boost, equalization, float
- IP67, Strong and durable aluminum caseFull automatic electronic protect function

Remote controller



Setting can be changed using the "S/SG-Unit" infrared remote programmer. For detailed instructions and settings, please see the S/SG-Unit programmer remote manual.

The following diagrams provide an overview of the connections and the proper order.



Hot plugging is prohibited!
Please connect the inductive sensor to R series controller first!

Technical Data

	Item	MPPT2050-DC32Li	MPPT3050-DC32LiG
Battery Parameters	Max Charging Current	20A	30A
	MPPT Charging Voltage	<Charging target voltage	
	Charging voltage target	3.0~5.0V (Programmable)	
	Charging voltage recovery	2.9~4.9V (Programmable)	
	Low voltage disconnect	2.4~4.0V (Programmable)	
	Low voltage reconnect	2.6~4.2V (Programmable)	
	Battery Type	Lithium	
	0°C Charging protection	Yes, Slow, No (Programmable)	
	Max volt on Bat. Terminal	10V	
Panel Parameters	Max volt on PV terminal *1	25V	34V
	Max input power	65W	100W
	MPPT tracking range *2	(Vb+1.0V) ~Voc*0.9	
	Dusk/Dawn detect volt.	1.0~3.0V (Programmable)	
	Day/Night delay time	0~30min (Programmable)	
Load Parameters	Output Current	0.1~1.5A (Programmable)	0.1~3A (Programmable)
	Output Voltage	12~34V	
	Output power	1~25W	1~60W
	Min Current	50mA (Dimming)	
	Current precision	±2%	
	Dimming	0~100% (Programmable)	
	Voltage of start dimming	2.8~Charging target voltage (Programmable)	
	Dimming percentage	5~40% (Programmable)	
System Parameters	Max tracking efficiency	>99.9%	
	Max charge conversion	93.0%	95.0%
	Max LED driver efficiency	93.0%	95.0%
	Self consumption	< 23mA@3.2V	<50mA@3.2V
	Dimensions	81*85.8*23.1mm	112*85.8*30mm
	Weight	280g	450g
	Ambient temperature	-35~+60°C	
	Ambient humidity	0~100%RH	
	Protection degree	IP67	
	Max Altitude	4000m	

*1.The product with the suffix G provides 2.4G communication. R/V cannot be configured for RS485 communication.

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

*3.The product without tail is infrared communication, Model name + "G", means 2.4G communication