



PC1800A SERIES (60A / 80A)

MPPT Solar Charge Controller

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PC1800A Series (60A/80A) MPPT Solar Charge Controller



INTRODUCTION

MPPT (Maximum Power Point Tracking) Solar Charge Controller offer an efficient, safe, multi-stage recharging process that prolongs battery life and assures peak performance from a solar array. Each Charge Controller allows customized battery recharging.

FEATURES

- LCD display , easy to operate on LCD screen
- Multi stage charging (3-stage charging , parallel charging and equalized charging function)
- BTS - Battery remote temperature sensor terminal
- Enable to charge Li-thium, Gel , lead-acid battery
- With RS485 & USB communication port
- Protection: PV array short circuit, PV reverse polarity, Battery reverse polarity, Over charging, Output short circuit



Max charging current
60A to 80A



Air cooling



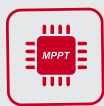
Multi protection



Battery smart
charge design



Battery DC voltage
12V/24V/48V (Auto detection)
36V (Setting)



Advanced maximum
power point tracking (MPPT)
technology



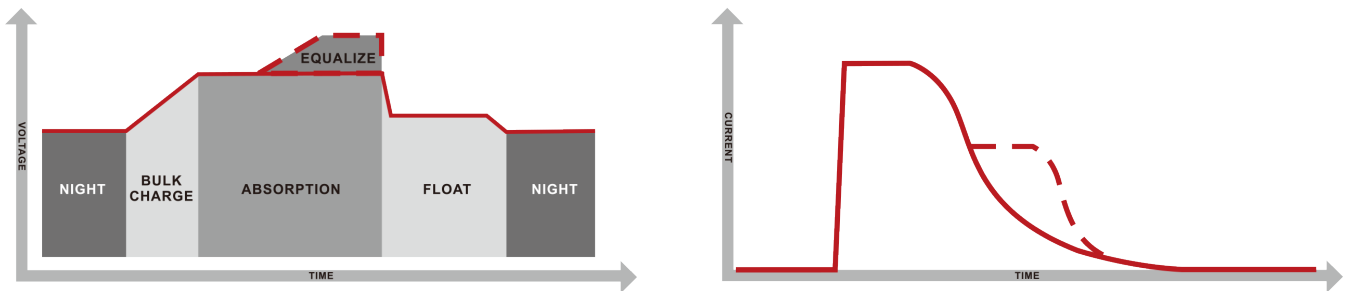
High tracking efficiency
>99.5%

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EQUALIZE STAGE CHARGING FUNCTION

Equalization function reverses the buildup of negative chemical effects like stratification, a condition where acid concentration is greater at the bottom of the battery than at the top. Equalization also helps to remove sulfate crystals that might have built up on the plates.



BATTERY REVERSE PROTECTION

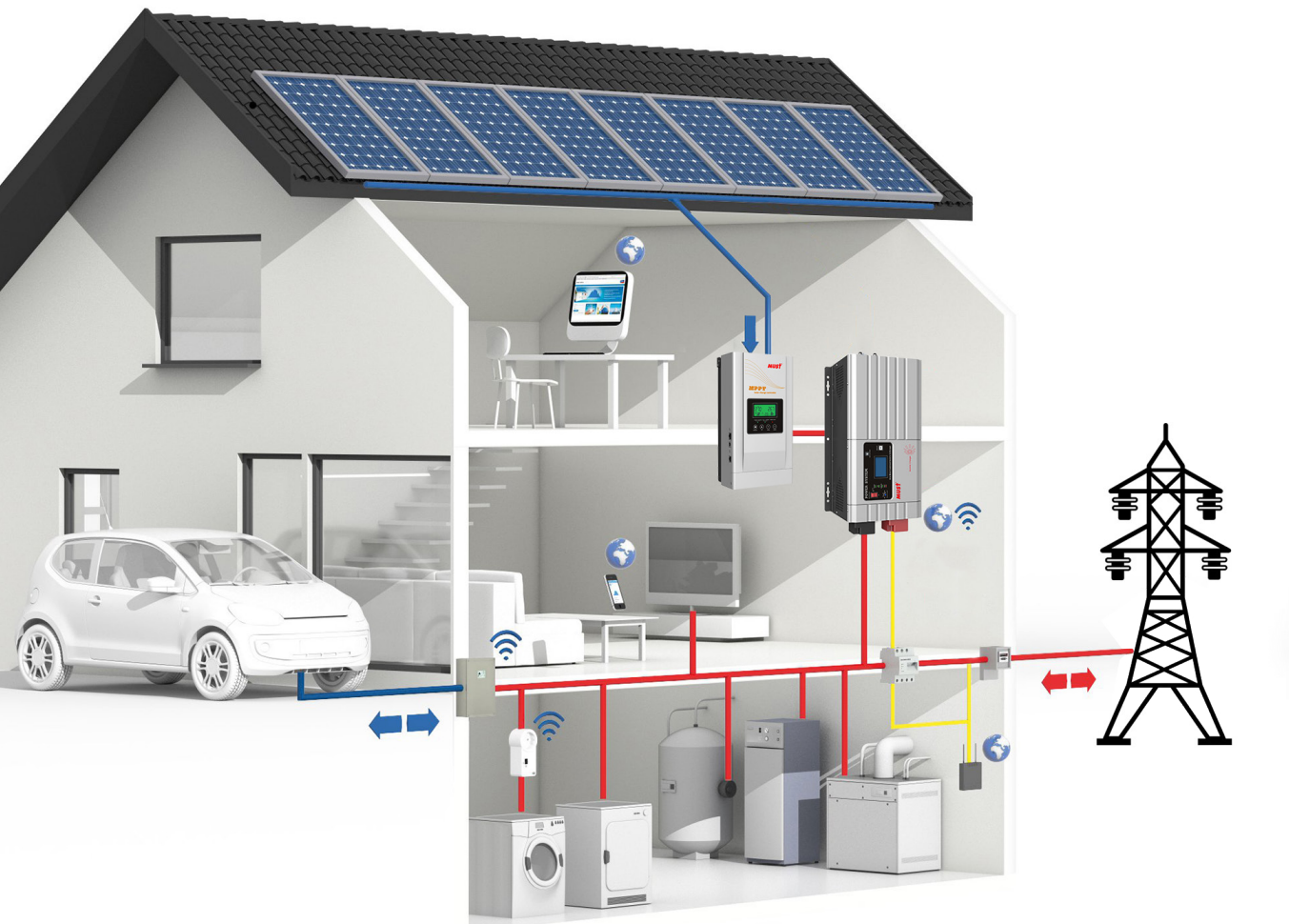
There's a battery reverse protection function in the board, then the controller will be perfectly protected even installer or user connect the battery in reverse pole accidentally

APPLICABLE PLACE

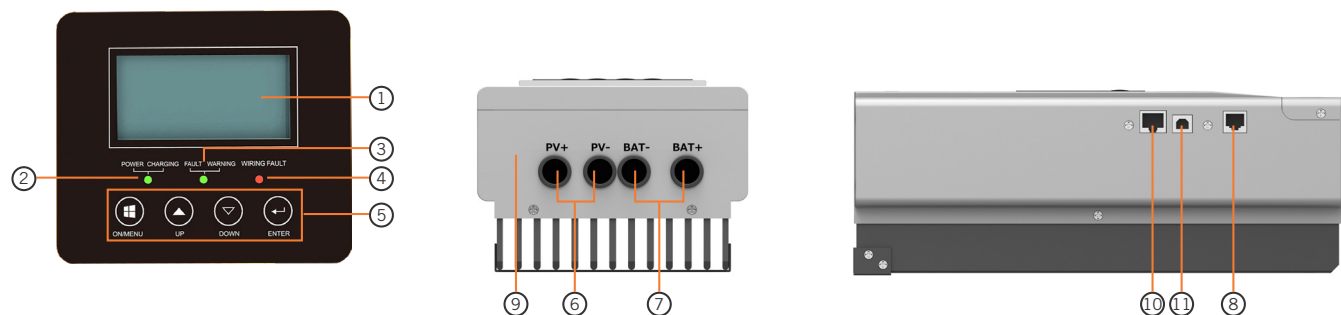
The solar charge controller is an automatic control device, it can be used in all solar power systems to control solar panel array to charge batteries.

Solar Inverter System Connection:

Power Inverter + Solar Charge Controller + Battery + Solar Panels + Grid + Application Loads



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|--------------------------------|--|------------------------------|
| 1. LCD display | 5. Operation button | 9. Wiring box cover |
| 2. Power ON/Charging indicator | 6. PV connextors | 10. RS485 communication port |
| 3. Fault and warning indicator | 7. Battery connectors | 11. USB |
| 4. Wiring fault indicator | 8. Battery temperature sensor terminal | |

MODEL		PC18-6015A		PC18-8015A	
Nominal Battery System Voltage		12V/24V/48VDC (Auto detection); 36V (Setting)			
ELECTRICAL SPECIFICATIONS	Battery Voltage	12V	24V	36V	48V
	Maximum Battery Current	60Amps		80Amps	
	Battery Voltage				
	PV Array MPPT Voltage Range	15~95V	30~130V	45~130V	60~130V
	Maximum Input Power	12 Volt-940W 24 Volt-1880W 36 Volt-2820W 48 Volt-3760W		12 Volt-1250W 24 Volt-2500W 36 Volt-3750W 48 Volt-5000W	
	Protections	Solar high voltage disconnect Solar high voltage reconnect Battery high voltage disconnect Battery high voltage reconnect High temperature disconnect High temperature reconnect			
BATTERY CHARGING	Charging Algorithm	3-Step or 4-Step (Li)			
	Charging Stages	Bulk,Absorption,Float			
	Temperature Compenssation Coefficient	-5mV / °C / cell (25°C ref.)			
	Temperature Compenssation Range	0°C to+50°C			
	Temperature Compenssation Set Points	Absorption, Float			
	Charging Set Points	Absorption Stage		Float Stage	
	Flooded Battery	14.2V/28.4V/42.6V/56.8V		13.7V/27.4V/41.1V/54.8V	
	AGM / GEL / LEAD Battery (Default)	14.4V/28.8V/43.2V/57.6V		13.7V/27.4V/41.1V/54.8V	
	Over-charging Voltage	15.5V/30.0V/45.0V/60.0V			
	Over-charging Comeback Voltage	14.5V/29.5V/44.5V/59.0V			
	Battery Defect Voltage	10.0V/17.0V/25.5V/34.0V			
MECHANICAL AND ENVIRONMENT	Product Size (W*H*D)(mm)	315*160*135			
	Product Weight (kg)	4.7kg			
	Ambient Temperature Range	-10°C to 75°C			
	Storage Temperature	-40°C to75°C			
	Humidity	0%~90% RH (No condensing)			
	Enclosure	IP20			