



## PC1600F Series MPPT Solar Charge Controller

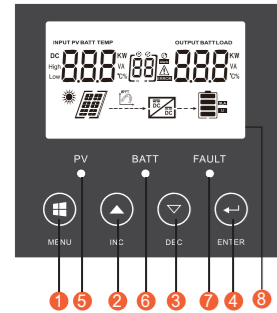
### Feature:

- 45A/60A/80A MPPT solar charge controller(Fan cooling)
- 12V/24V/48V auto work
- MPPT efficiency>99%,Peak conversion efficiency >98%
- DSP processors technology ensure high speed and performance
- Multi-stage charging mode
- Protection: PV array short circuit , PV reverse polarity , Battery reverse polarity , Over charging , Output short circuit

### 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.

### LCD Display Information



1. MENU: Enter or exit setting mode.
2. INC: Increase the setting data.
3. DEC: Decrease the setting data.
4. ENTER: Confirm the selection in setting mode.
8. LCD display

LED indicator	System status	
5. PV	Green On	PV voltage normal
	Flashing every 1s	PV fault is recovering
	Flashing every 2s	PV fault can't recover
6. BATT	Yellow On	Battery voltage normal
	Flashing every 1s	Battery fault is recovering
	Flashing every 2s	Battery fault can't recover
7. FAULT	Red Flashing	Fault
	Off	Normal

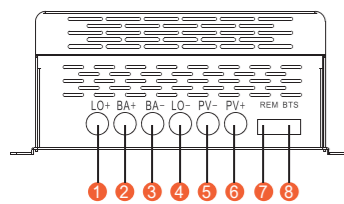
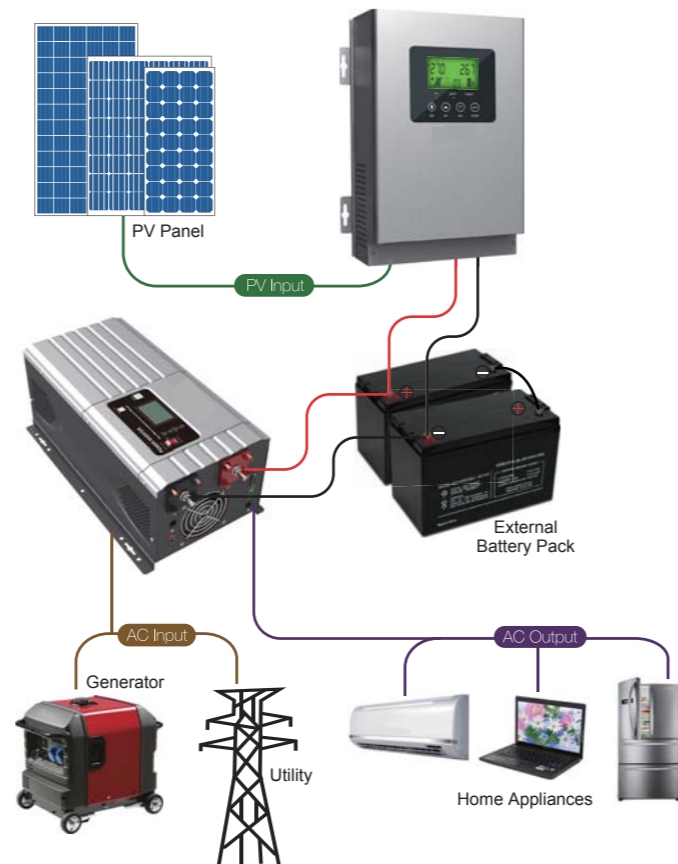


Figure 1 Charge Controller wiring compartment marks

1. LO+: The load positive terminal
2. BA+: The battery positive terminal
3. BA-: The battery negative terminal
4. LO-: The load negative terminal
5. PV-: PV array negative terminal
6. PV+: PV array positive terminal
7. REM: RS485 Communication network terminal(Use for computer)
8. BTS: Battery Remote Temperature sensor terminal

### Solar System Connection



### Specification

MODEL	PC16-4515F	PC16-6015F	PC16-8015F	
<b>Nominal Battery System Voltage</b>	12V/24V/36V/48VDC (Auto detection)			
<b>CONTROLLER INPUT</b>	PV Open Circuit Voltage	100VDC@12V/ 145VDC @24V/ 145VDC @36V/ 145VDC @48V		
	PV Array MPPT Voltage Range	16VDC~100VDC / 32VDC~130VDC / 48VDC~130VDC / 64VDC~130VDC		
	Max PV Input Power(12V)	600W	800W	1050W
	Max PV Input Power(24V)	1200W	1600W	2100W
	Max PV Input Power(36V)	1800W	2400W	3150W
<b>BATTERY</b>	Max PV Input Power(48V)	2400W	3200W	4200W
	Absorption Voltage	12.5VDC/25.0VDC/37.5VDC/50.0VDC		
	Refloat Voltage	13.7VDC/27.4VDC/41.1VDC/54.8VDC		
	Float Voltage	14.3VDC/28.6VDC/42.9VDC/57.2VDC		
	Low Voltage Protection Point	8.5VDC/17VDC/25.5VDC/34.0VDC		
<b>PATTERY</b>	Temperature Compensation coefficient	-3mv/°C /cell (25°C vef)		
	Peak Conversion efficiency	98% (MPPT Efficiency 99%)		
<b>GENERAL SPECIFICATION</b>	Max Charging Current	45 amps continuous @ 40°C ambient	60 amps continuous @ 40°C ambient	80 amps continuous @ 40°C ambient
	Radiating mode	Fan cooling		
<b>DISPLAY &amp; PROTECTION</b>	LED indication	Systematic operation, LV indication, LV protection, over charge protection, short circuit protection		
	LCD display	Charge voltage, charge current, voltage of storage battery, capacity of storage battery, output current		
	Alarm Protections	PV array short circuit, PV reverse polarity		
		Battery reverse polarity, Over charging protection		
		Output short circuit protection		
Low voltage protection for storage battery				
<b>MECHANICAL SPECIFICATIONS</b>	Mounting	Wall mount		
	Machine Dimension(W*H* D)	167.6*257.2*82.9mm (per pcs)		
	G.W(Kg)	3Kg/pcs		
	Package Dimension(W*H* D)	612*308.2*235.6mm (5pcs/Carton)		
	Gross Weight(Kg)	17.4Kg (per Carton)	19Kg (per Carton)	
<b>OTHER</b>	Environmental Rating	Indoor		
	Operation Temperature Range	-25~55°C		
	Ambient humidity	0~90% relative humidity(non-condensing)		
	Altitude	≤3000m		
	Loading(20GP/40GP/40HQ)	3000pcs / 6000pcs / 7200pcs		

\* Product specifications are subject to change without further notice.

### Back Panel

