# **Solar System**



# **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	
		Off	PV is off	
6. BATT	Yellow	On	Battery voltage normal	
		Flashing every 1s	Battery fault is recovering	
		Flashing every 2s	Battery fault can't recover	
		Off	Battery is off	
7. FAULT	Red	Flashing	Fault	
		Off	Normal	

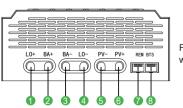
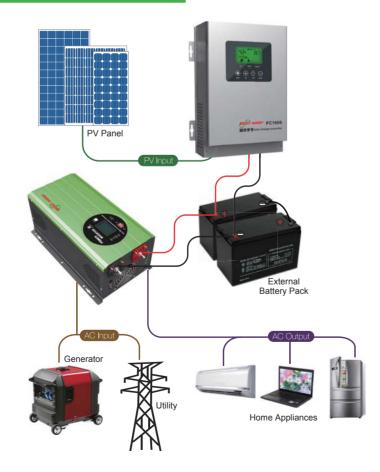


Figure 1 Charge Controller wiring compartment marks

- 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: Communication network terminal
- 8. BTS: Remote external temperature terminal

# **Solar System Connection**



## **Specification**

MODEL		PC16-4515F	PC16-6015F	PC16-8015F	
Nominal Battery System Voltage		12V/24V/36V/48VDC (Auto detection)			
	PV Open Circuit Voltage	100VDC@12V/ 145VDC @24V/ 145VDC @36V/ 145VDC @48V			
CONTROLLER INPUT	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	
	Max PV Input Power(48V)	2400W	3200W	4200W	
BATTERY	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			
	Temperature Compensation coefficient	-3mv/°C /cell (25°C vef)			
PATTERY	Peak Conversion efficiency	98% (MPPT Efficiency 99%)			
	Max Charging Current	45 amps continuous @ 40°C ambient	60 amps continuous @ 40°C ambient	80 amps continuous @ 40°C ambient	
GENERAL SPECIFICATION	Radiating mode	Fan cooling			
DISPLAY & PROTECTION	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			
		PV array short circuit, PV reverse polarity			
	Alarm Protections	Battery reverse polarity, Over charging protection			
	Alaim Protections	Output short circuit protection			
		Low voltage protection for storage battery			
MECHANICAL SPECIFICATIONS	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)	
OTHER	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			

<sup>\*</sup> Product specifications are subject to change without further notice.

#### **Back Panel**





-31-