# -Solar System



# **PC1600A Series MPPT Solar Charge Controller**

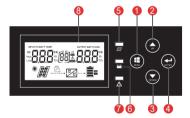
#### Feature:

- 45A/60A MPPT Solar charge controller
- 12V/24V/36V/48V auto work
- MPPT efficiency>99%,Peak conversion efficiency >98%
- · DSP processors architecture 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:

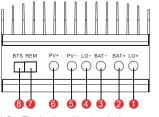
MPPT (Maximum Power Point Tracking)Solar Charge Controller offer an efficient, safe, multi-stage recharging process that prolongs battery life and assures peak performance from a solar array. Each Charge Controller allows customized battery recharging.

#### LCD Display Information



- 1. MENU: Enter or exit setting mode.
- 2. UP: Increase the setting data. 8. LCD display
- 3. DOWN: Decrease the setting data.

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	



1. LO+: The load positive terminal

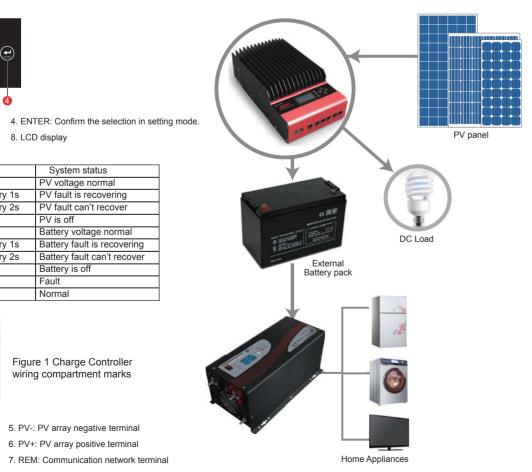
2. BA+: The battery positive terminal

3. BA-: The battery negative terminal 4. LO-: The load negative terminal

Figure 1 Charge Controller wiring compartment marks

- 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**



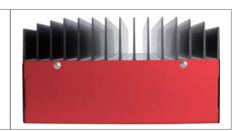
## **Specification**

Model		PC16-4515A	PC16-6015A	
Default Battery System Voltage		12VDC/24VDC/36VDC/48VDC (Auto Detection)		
	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		
CONTROLLER	Max PV Input Power (12V)	600W	800W	
INPUT	Max PV Input Power (24V)	1200W	1600W	
	Max PV Input Power (36V)	1800W	2400W	
	Max PV Input Power (48V)	2400W	3200W	
	Peak Conversion efficiency	98% (MPPT Efficiency 99%)		
BATTERY	Max Charging Current	45 amps continuous	60 amps continuous	
	Absorption Voltage	12.5VDC/25.0VDC/37.5VDC/50.0VDC		
	Refloat Voltage	13.7VDC/27.4 VDC/41.4VDC/54.8VDC		
	Float Voltage	14.3VDC/28.6 VDC/42.9VDC/57.4VDC		
	Low Voltage Protection Point	10VDC/20.0 VDC/30.0VDC/40.0VDC		
	Output Voltage	10.0VDC~14.5VDC / 20VDC~29.0VDC / 30.0VDC~43.5VDC / 40.0VDC~58.0VDC		
	Max Load Current	45 amps continuous	60 amps continuous	
DC OUTPUT	Warning for low voltage	10.25VDC/20.5 VDC/30.75VDC/41.0VDC		
	Cutoff for low voltage	10.0VDC/20.0 VDC/30.0VDC/40.0VDC		
	Low voltage recovery	11.0VDC/22.0 VDC/33.0VDC/44.0VDC		
GENERAL SPECIFICATION	Radiating mode	Automatic cooling		
DISPLAY & PROTECTION	LED indication	Systematic operation, LV indication, LV protection, over charge protection, loads 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		
		Output short circuit protection		
		Low voltage protection for storage battery		
MECHANICAL	Mounting	Wall mount		
SPECIFICATIONS	W*H* D(mm)/Net Weight(kg)	205*371.7*124.3mm/6.45kg		
OTHER	Environmental Rating	Indoor		
	Operation Temperature Range	-25~+55°C		
	Ambient humidity	0~90% relative humidity(non-condensing)		
	Altitude	≤ 3000m		
	Loading(20GP/40GP/40HQ)	5500pcs / 11000pcs / 13000pcs		

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

#### **Back Panel**





-33-