# **Solar System**



## PC1600A Series **MPPT Solar Charge Controller**

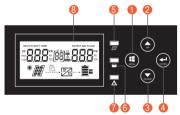
#### Feature:

- 45A/60A MPPT Solar charge controller (Air cooling)
- 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
- DC load support

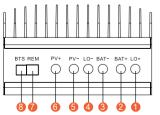
#### **Introduction:**

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. 4. ENTER: Confirm the selection in setting mode.
- 2. UP: Increase the setting data. 8. LCD display
- 3. DOWN: Decrease the setting data.
- LED indicator System status PV voltage normal Flashing every 1s PV fault is recovering 5. PV Green Flashing every 2s PV fault can't recover PV is off Battery voltage normal Flashing every 1s Battery fault is recovering 6. BATT Yellow Flashing every 2s Battery fault can't recover Battery is off Flashing Fault 7. FAULT Red Normal



3. BA-: The battery negative terminal

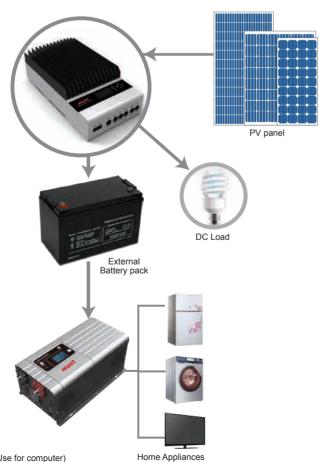
1. LO+: The load positive terminal 5. PV-: PV array negative terminal 2. BA+: The battery positive terminal 6. PV+: PV array positive terminal

7. REM: RS485 Communication network terminal(Use for computer)

4. LO-: The load negative terminal 8. BTS: Battery Remote Temperature sensor terminal

Figure 1 Charge Controller wiring compartment marks

#### **Solar System Connection**



### **Specification**

	MODEL	PC16-4515A	PC16-6015A
Nomina	al Battery System Voltage	12VDC/24VDC/48VI	DC (Auto Detection)
CONTROLLER INPUT	PV Open Circuit Voltage	100VDC@12V/ 145VDC @24V/ 145VDC @48V	
	PV Array MPPT Voltage Range	16VDC~100VDC / 32VDC~130VDC / 64VDC~130VDC	
	Max PV Input Power (12V)	600W	800W
	Max PV Input Power (24V)	1200W	1600W
	Max PV Input Power (48V)	2400W	3200W
BATTERY	Peak Conversion efficiency	98% (MPPT Efficiency 99%)	
	Max Charging Current	45 amps continuous	60 amps continuous
	Absorption Voltage	12.5VDC/25.0VDC/50.0VDC	
	Refloat Voltage	13.7VDC/27.4 VDC/54.8VDC	
	Float Voltage	14.3VDC/28.6 VDC/57.4VDC	
	Low Voltage Protection Point	10VDC/20.0 VDC/40.0VDC	
DC OUTPUT	Output Voltage	10.0VDC~14.5VDC / 20VDC~29.0VDC / 40.0VDC~58.0VDC	
	Max Load Current	45 amps continuous	60 amps continuous
	Warning for low voltage	10.25VDC/20.5 VDC/41.0VDC	
	Cut off for low voltage	10.0VDC/20.0 VDC/40.0VDC	
	Low voltage recovery	11.0VDC/22.0 VDC/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 SPECIFICATIONS	Mounting	Wall mount	
	Machine Dimension(W*H* D)	205*371.7*124.3mm (per pcs)	
	Net Weight(Kg)	6.45Kg	
	Package Dimension(W*H* D)	462*295*220mm (1pcs/Carton)	
	Gross Weight(Kg)	8.1Kg	
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**





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