



PC1600A Series MPPT Solar Charge Controller

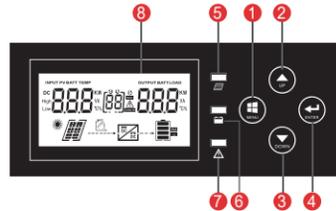
Feature:

- 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.
3. DOWN: 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

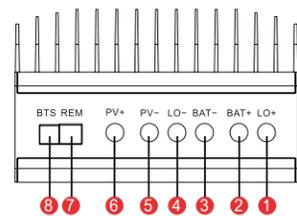
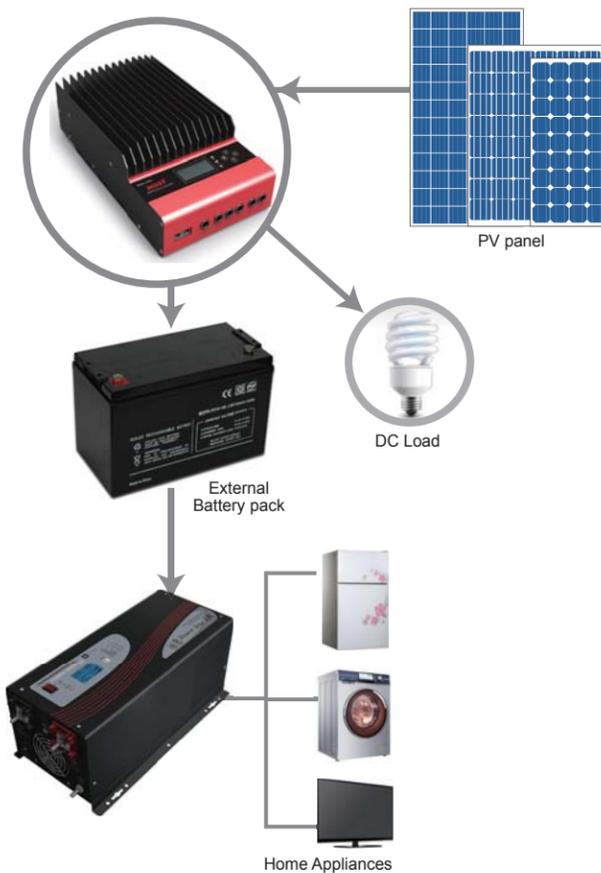


Figure 1 Charge Controller wiring compartment marks

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	PC16-4515A	PC16-6015A	
Default Battery System Voltage	12VDC/24VDC/36VDC/48VDC (Auto Detection)		
CONTROLLER INPUT	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
	Max PV Input Power (24V)	1200W	1600W
	Max PV Input Power (36V)	1800W	2400W
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/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		
DC OUTPUT	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
	Warning for low voltage	10.25VDC/20.5 VDC/30.75VDC/41.0VDC	
	Cut off 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	
	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		
MECHANICAL SPECIFICATIONS	Mounting	Wall mount	
	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	

* Product specifications are subject to change without further notice.

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