



# PC1600A SERIES (20/30/40A)

MPPT Solar Charge Controller

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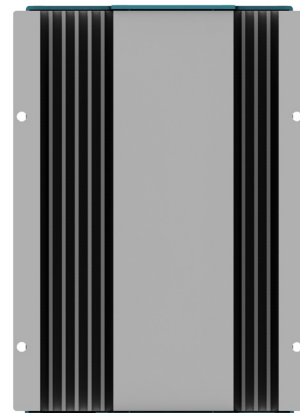
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# MUST®

## PC1600A Series (20/30/40A)

MPPT Solar Charge Controller



### 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.

### FEATURES

- LCD display , easy to operate on LCD screen
- Multi stage charging (3-stage charging , parallel charging and equalized charging function)
- BTS - Battery remote temperature sensor terminal
- Enable to charge Li-thium, Gel , lead-acid battery
- With RS485 & USB communication port
- Protection: PV array short circuit, PV reverse polarity, Battery reverse polarity, Over charging, Output short circuit



Max charging current  
20A to 40A



Battery DC voltage  
12V/24V  
(Auto detection )



Multi-stage  
charging mode



Max charging current  
20A to 40A



Radiating mode  
Automatic cooling



Peak conversion  
efficiency:98%  
(MPPT Efficiency 99%)

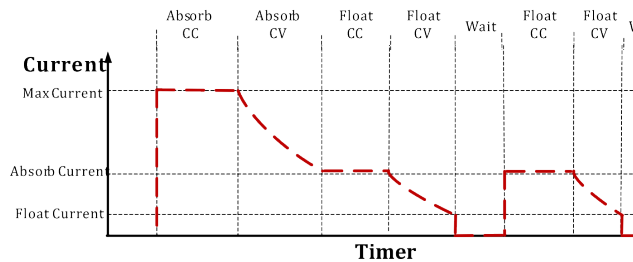
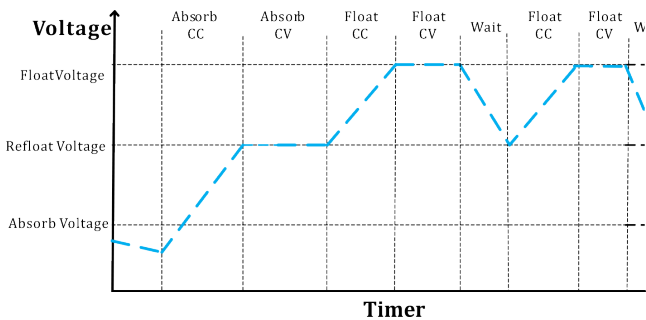


Multi protection



### MULTI STAGE CHARGING

The charge controller is a sophisticated, multi-stage battery charger that uses several regulation stages to allow fast recharging of the battery system while ensuring a long battery life.



### BATTERY REVERSE PROTECTION

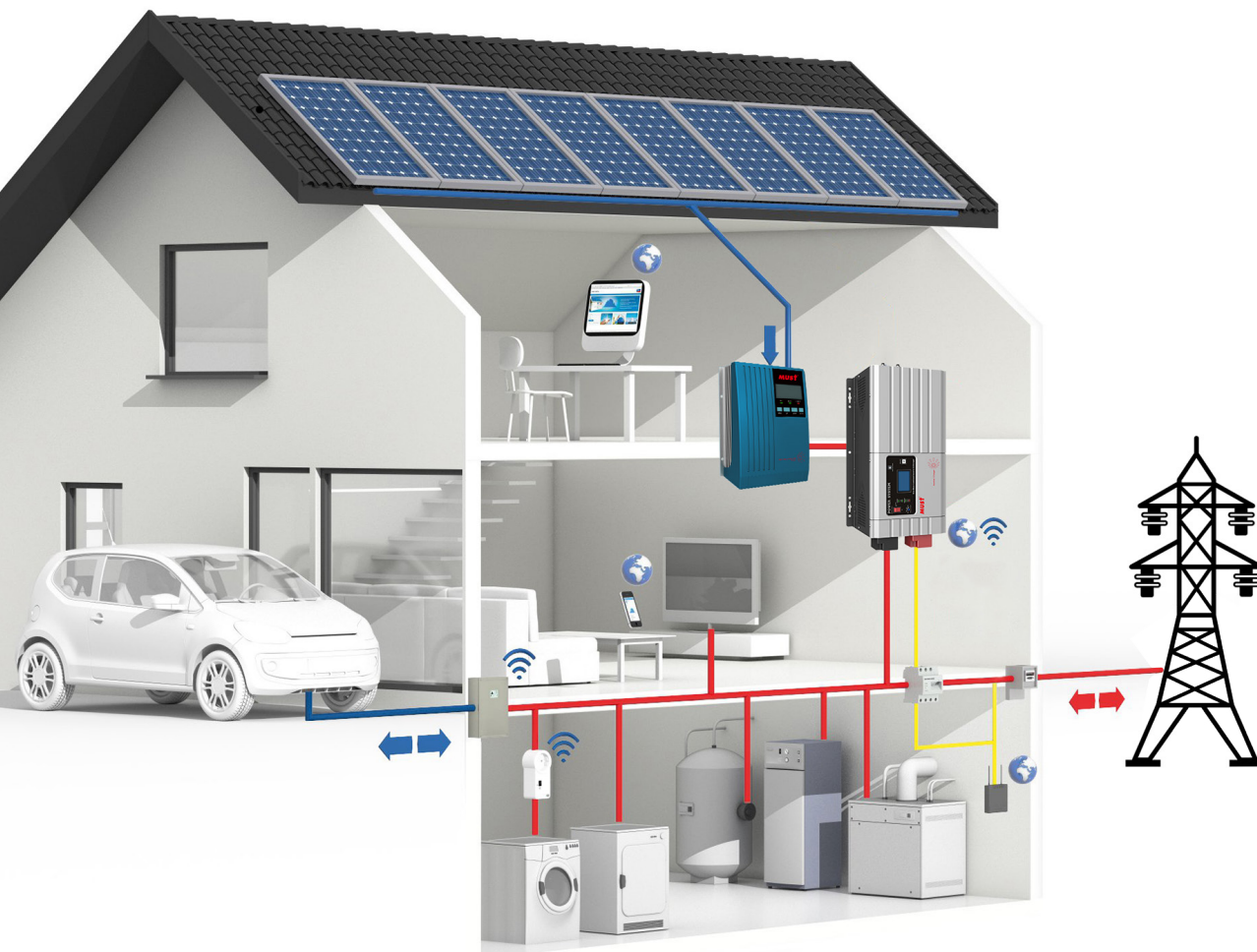
There's a battery reverse protection function in the board, then the controller will be perfectly protected even installer or user connect the battery in reverse pole accidentally

### APPLICABLE PLACE

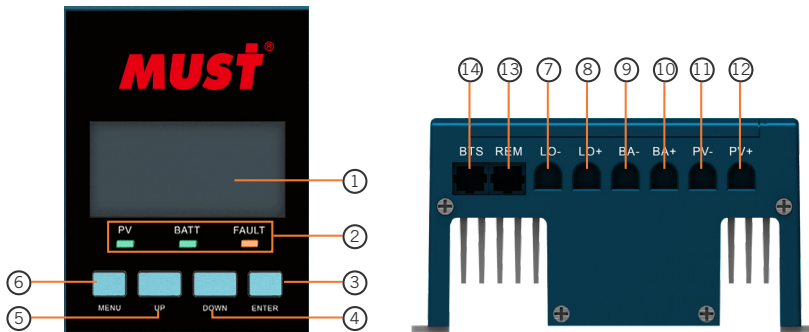
The solar charge controller is an automatic control device, it can be used in all solar power systems to control solar panel array to charge batteries.

### Solar Inverter System Connection:

Power Inverter + Solar Charge Controller + Battery + Solar Panels + Grid + Application Loads



## PC1600A Series (20/30/40A) MPPT Solar Charge Controller



1. LCD Display
2. LED Indicator
3. Confirm the selection in setting mode
4. Decrease the setting data
5. Increase the setting data
6. Enter or exit setting mode
7. The load negative terminal
8. The load positive terminal
9. The battery negative terminal
10. The battery positive terminal
11. PV array negative terminal
12. PV array positive terminal
13. Communication network terminal
14. Remote external temperature terminal

MODEL		PC16-2015A	PC16-3015A	PC16-4015A
Nominal Battery System Voltage		12VDC/24VDC (Auto Detection)		
CONTROLLER INPUT	PV Open Circuit Voltage	100VDC@12V/145VDC @24V		
	PV Array MPPT Voltage Range	16VDC~100VDC / 32VDC~130VDC		
	Max PV Input Power(12V)	300W	450W	600W
	Max PV Input Power(24V)	600W	900W	1200W
BATTERY	Absorption Voltage	12.5VDC / 25.0VDC		
	Refloat Voltage	13.7VDC / 27.4VDC		
	Float Voltage	14.3VDC / 28.6VDC		
	Low Voltage Protection Point	10.0VDC / 20.0VDC		
DC OUTPUT	Output Voltage	10.0~14.5VDC / 20.0~29.0VDC		
	Peak Conversion Efficiency	98%(MPPT Efficiency 99%)		
	Max Charging Current	20 amps continuous	30 amps continuous	40 amps continuous
	Max Output Current	20 amps continuous	20 amps continuous	20 amps continuous
	Low Voltage alarm	10.25VDC / 20.5VDC		
	Low Voltage cutoff	10.0VDC / 20.0 VDC		
GENERAL SPECIFICATION	Low Voltage Recovery	11.0VDC / 22.0VDC		
	Radiating Mode	Automatic cooling		
DISPLAY & PROTECTION	LED Indication	Systematic operation, LV indication, LV protection, Over charge protection Loads protection, Short circuit protection		
	LED 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		
	Machine Dimension(W*H*D)	154*236*88mm (color box / pcs)		
	Gross Weight (kg)(per pcs)	2.5kg		
	Package Dimension (W*H*D)	610*308*230mm (4PCS/Carton)		
	Gross Weight (kg)(per carton)	10.8kg	13.4kg	13.4kg
OTHER	Environmental Rating	Indoor		
	Operation Temperature Range	-25°C ~ +55°C		
	Ambient Humidity	0~90% relative humidity (non-condensing)		
	Altitude	≤3000m		
	Loading (20GP/40GP/40HQ)	2500pcs / 5000pcs / 5800pcs		