


**MPPT Solar Charge Controller (245V)**  
**PC1800F Series (60A/80A/100A)**



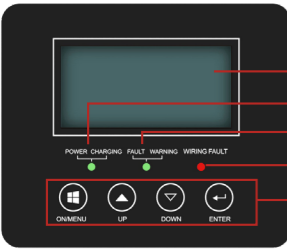
### Features

- LCD display , easy to operate on LCD screen
- Multi stage charging (3-stage charging , parallel charging and equalized charging function)
- Maximum Solar Input Voltage: 245V
- 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

### Introduction

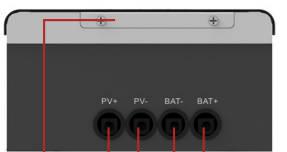
MPPT (Maximum Power Point Tracking) Solar Charge Controller offer an efficient, safe, multi-stage recharging process that prolongs battery life and assures peak performance from a solar array. Each Charge Controller allows customized battery recharging.

### Back panel printing description




1. LCD display
2. Power ON/Charging indicator
3. Fault and warning indicator
4. Wiring fault indicator
5. Operation button

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[ PC18-8015F ]



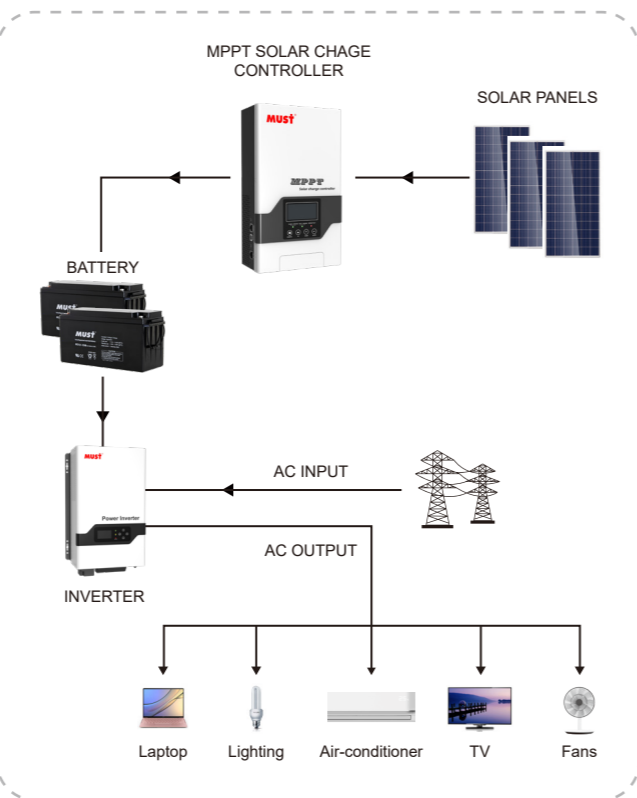
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6. PV connectors
7. Battery connectors
8. Battery temperature sensor terminal
9. Wiring box cover
10. RS485 communication port
11. USB
12. The load positive terminal
13. The load negative terminal

[ PC18-10015F ]

### Solar system connection



### Specification

MODEL		PC18-6025F	PC18-8025F	PC18-10025F	
Nominal Battery System Voltage		12V / 24V / 48VDC (Auto detection); 36V (Setting)			
CONTROLLER INPUT	Battery Voltage	12V / 24V / 36V / 48V			
	Maximum Solar Input Voltage	12V (VBAT)	100V		
		24V (VBAT)	245V		
		36V (VBAT)	245V		
		48V (VBAT)	245V		
	PV Array MPPT Voltage Range	12V (VBAT)	15-95V		
		24V (VBAT)	30~230V		
		36V (VBAT)	45~230V		
		48V (VBAT)	60~230V		
	Maximum Input Power	12V (VBAT)	940W	1250W	1560W
24V (VBAT)		1880W	2500W	3120W	
36V (VBAT)		2820W	3750W	4680W	
48V (VBAT)		3760W	5000W	6250W	
BATTERY	Charging Set Points	Flooded Battery	Absorption Stage 14.2V / 28.4V / 42.6V / 56.8V		
		Float Stage 13.7V / 27.4V / 41.1V / 54.8V			
	AGM (Default)	Absorption Stage 14.4V / 28.8V / 43.2V / 57.6V			
		Float Stage 13.7V / 27.4V / 41.1V / 54.8V			
	Over-charging Voltage	15.5V / 30.0V / 45.0V / 60.0V			
	Over-charging Comeback Voltage	14.5V / 29.5V / 44.5V / 59.0V			
	Battery Defect Voltage	10.0V / 17.0V / 25.5V / 34.0V			
	Temperature Compensation Coefficient	-5mv / °C / cell (25°C vef)			
	Peak Conversion Efficiency	98% (MPPT Efficiency 99%)			
	Maximum Battery Current	60A	80A	100A	
Maximum DC load current	/	/	100A		
Max Charging Current	60amps continuous @ 40°C ambient	80amps continuous @ 40°C ambient	100amps continuous @ 40°C ambient		
DISPLAY & PROTECTION	Protections	Solar high voltage disconnect/ Solar high voltage reconnect/ Battery high voltage disconnect Battery high voltage reconnect/ High temperature disconnect/ High temperature reconnect			
	MECHANICAL SPECIFICATIONS		Machine Dimension (W*H*D) 306.6*163.6*94.9mm	284*165*97mm	
		Package Dimension (W*H*D)	/	/	
		G.W	3kg	4kg	
		N.W	/	/	
OTHER	Mounting	Wall mount			
	Environmental Rating	Indoor			
	Enclosure	IP20			
	Radiating Mode	Fan cooling			
	Operation Temperature Range	-10~55°C			
	Ambient Humidity	0~90% relative humidity (non-condensing)			
Altitude	≤3000m				

The technical specifications of this document are subject to change without any notice