

## Solar Charge Controller

45/60A MPPT solar charge controller; PV input:145V max;12V/24V/36V/48V auto work ;MPPT efficiency>99% ,peak conversion efficiency>98% .

## ■ Product Model:

- MEPC1600F Series MEPC16-4515F
- o MEPC1600F Series MEPC16-6015F





## **Electronic Protections of Solar Inverter**:

- PV array short circuit
- PV over current
- PV over voltage
- PV reverse polarity
- Battery reverse polarity
- Over charging
- Overheating protection
- o 45/60A MPPT solar charge controller
- o PV input:145V max
- o 12V/24V/36V/48V auto work
- o MPPT efficiency>99% ,peak conversion efficiency>98%
- o DSP processors architecture ensure high speed and performance
- o Four-stages charging mode
- Protection: PV array short circuit, PV reverse polarity, battery reverse polarity, over charging, output short circuit

PC1600 is an advanced Maximum Power Point Tracking (MPPT) controller for off-grid photovoltaic (PV) systems. The controller features a smart tracking algorithm that maximizes the energy harvest from the PV by rapidly finding the solar array peak power point in all the weather condition. The controller provides higher efficiency up to 98% with lower power loss.





## Specifications

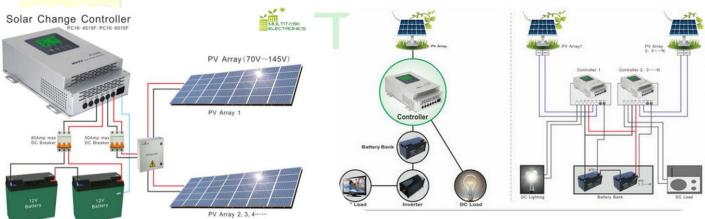
Model		MEPC16-4515F	MEPC16-6015F
Default Battery System Voltage		12V/24V/36V/48VDC (adjustable)	
CONTROLLER INPUT	PV Open Circuit Voltage Range	16V~100V for 12V battery system/32V~145V for 24V battery system/ 48V~145V for 36V battery system/64V~145V for 48V battery system	
	Max PV Input Power(12V)	600W	800W
	Max PV Input Power(24V)	1200W	1600W
	Max PV Input Power(36V)	1800W	2400W
	Max PV Input Power(48V)	2400W	3200W
BATTERY	Absorption Voltage	13.5VDC/27.0VDC/40.5VDC/54.0VDC	
	Refloat Voltage	13.7VDC/27.4VDC/41.1VDC/54.8VDC	
	Float Voltage	14.3VDC/28.6VDC/42.9VDC/57.2VDC	
	Low Voltage Protection Point	10.5VDC/21.0VDC/31.5VDC/42.0VDC	
DC OUTPUT	Output Voltage	11.0~14.3VDC/22.0~28.6VDC/33.0~42.9VDC/ 44.0~57.2VDC	
	Peak Conversion efficiency	98% (MPPT Efficiency 99%)	
	Max Charging Current	45amps continuous @ 40°C ambient	60amps continuous @ 40°C ambient
	Warning for low voltage	11.5VDC/23.0VDC/34.5VDC/46.0VDC	
	Cutoff for low voltage	10.5VDC/21.0 VDC/31.5VDC/42.0VDC	
	Low voltage recovery	11.5VDC/23.0 VDC/34.5VDC/46.0VDC	
GENERAL SPECIFICATION	Charge mode	MPPT, PWM, constant current-constant voltage, function of automatic protection for storage battery	
	Radiating mode	Fan cooling	
	Working mode	Four stage: Absorption CC, Absorption CV, Float CC, Float CV	





DISPLAY	LED indication	Systematic operation, LV indication, LV protection,	
&		over charge protection, loads protection, short circuit	
PROTECTION		protection	
	LCD display	Charge voltage, charge current, voltage of storage	
		battery, capacity of storage battery, output current	
	Alarm Protections	PV array short circuit, PV reverser polarity	
		Battery reverse polarity, Over charging protection	
		Output short circuit protection	
		Low voltage protection for storage battery	
MECHANICAL	Mounting	Wall mount	
SPECIFICATIONS	W*H*	167.6*257.1*82.9mm/3kg	
	D(mm)/G.W(kg)		
OTHER	Environmental	Indoor	
	Rating	and the second s	
	Operation	-25~55°C	
	Temperature		
	Range		
	Ambient	0~90% relative humidity(non-condensing)	
	humidity		
	Altitude	≤3000m	





24VDC Battery Bank