

MPPT SOLAR CHARGE CONTROLLER

PC1800F Series

60~100A | 12V,24V,36V,48V | 245V



Wide Compatibility

- Supports 12V–48V batteries (Li-ion, Gel, Lead-acid battery)
- Maximum Solar Input Voltage: 245V

Smart Charging

- 3-stage, parallel, equalized charging
- Support Battery temperature sensor terminal (BTS).

Easy Operation

- LCD screen for simple monitoring and control.
- Simple wiring for easier installation.

Multiple Protection

- Protects against reverse polarity, overcharge, short circuit;
- RS485 & USB supported.

MAIN PARAMETER

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 Conefficient			-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					

OTHER PARAMETER

MECHANICAL SPECIFICATIONS		
Machine Dimension (W*H*D)(mm)	163.6*306.6*94.9	165*284*97
Package Dimension (W*H*D)(mm)	/	/
N.W(kg)	3	4
G.W(kg)	/	/
OTHER		
Mounting	Wall mount	
Environmental Rating	Indoor	
Enclosure	IP20	
Radiating Mode	Fan cooling	
Operating Temperature Range	-10~55°C	
Ambient Humidity	0~90% relative humidity (non-condensing)	
Altitude	≤3000m	
CERTIFICATION & STANDARDS		
CE-LVD: EN 62109-1:2010; EN 62109-2:2011; CE-EMC: EN IEC 61000-6-1:2019 EN IEC 61000-6-3:2021		