

MPPT SOLAR CHARGE CONTROLLER

PC1800A Series

30A, 40A | 12V,24V

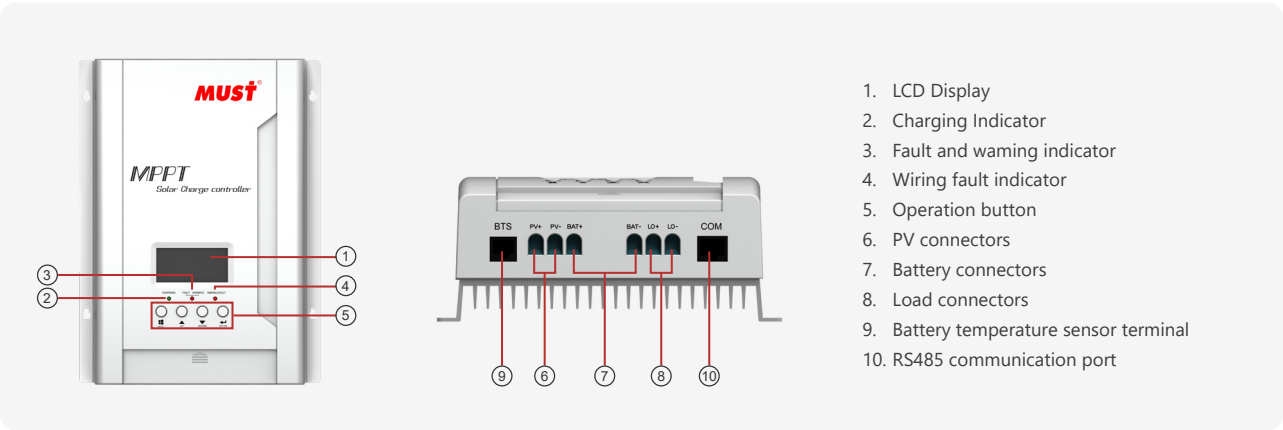
This solar charge controller is an advanced solar charger with maximum power point tracking. Applying intelligent MPPT algorithm, it allows solar charge controller to extract maximum power from solar arrays by finding the maximum power point of the array. The MPPT battery charging process has been optimized for long battery life and improved system performance. Self-diagnostics and electronic error protections prevent damage when installation errors or system faults occur.



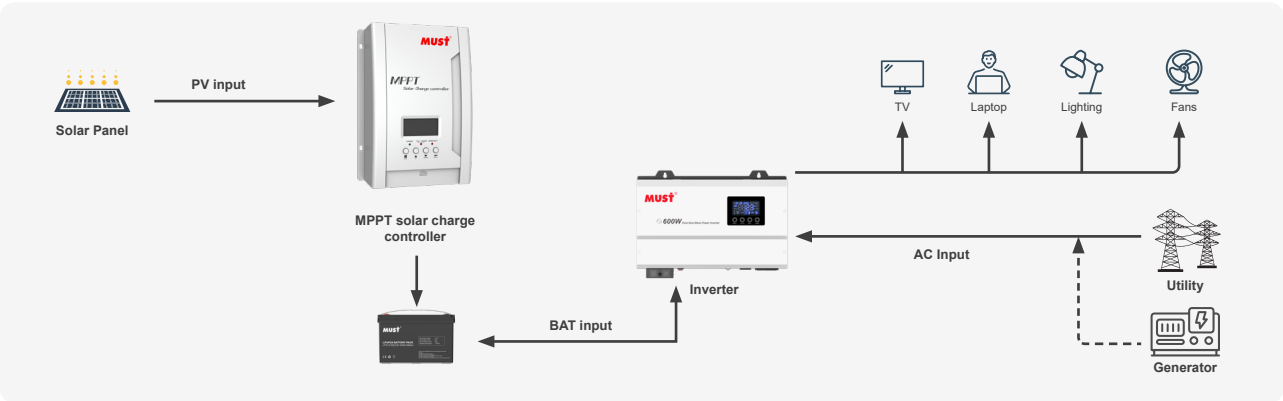
- Intelligent Maximum Power Point Tracking technology increases efficiency 25%~30%
- Compatible for PV systems in 12V,or24V
- Three-stage charging optimizes battery performance
- Maximum charging current up to 30A/40A
- Advanced MPPT technology,with efficient no less than 99%
- Maximum DC- DC conversion efficiency of 98%
- Battery temperature sensor(BTS) automatically provides temperature compensation Automatic battery voltage detection
- Integrated intelligent slot compatible with 485 communication



Back panel description



Solar system connection



MODEL		PC18-3015A		PC18-4015A	
Nominal Battery System Voltage		12V / 24V (Auto detection)			
CONTROLLER INPUT					
Battery Voltage		12V/ 24V			
Open circuit voltage		145V			
PV Array MPPT Voltage Range		60-130VDC			
Maximum Input Power	12V	432W		576W	
	24V	864W		1152W	
BATTERY					
Charging Set Points	Flooded Battery	Absorption Stage	14.2V/28.4V		
		Float Stage	13.7V/27.4V		
	AGM/GEL/LEAD (Default)	Absorption Stage	14.4V/28.8V		
		Float Stage	13.7V/27.4V		
Over-charging Voltage		15.5V / 30.0V			
Over-charging Comeback Voltage		14.5V / 29.5V			
Battery Defect Voltage		10.0V / 17.0V			
Temperature Compensation Coefficient		-5mv / °C /cell (25°C vef)			
Peak Conversion Efficiency		98% (MPPT Efficiency 99%)			
Maximum Battery Current		30A		40A	
Max Charging Current		30amps continuous @ 40°C ambient		40amps continuous @ 40°C ambient	
GENERAL SPECIFICATION					
Radiating Mode		Automatic cooling			
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					
Mounting		Wall mount			
Machine Dimension (W*H*D)(mm)		187*255*72mm			
Package Dimension (W*H*D)(mm)		/			
N.W(kg)		/			
G.W(kg)		/			
OTHER					
Environmental Rating		Indoor			
Enclosure		IP30			
Operation Temperature Range		-10~50°C			
Ambient Humidity		0~90% relative humidity (non-condensing)			
Altitude		≤3000m			
CERTIFICATION & STANDARDS					

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