

**MPPT Solar Charge Controller**  
**PC1800A Series (30A/40A)**



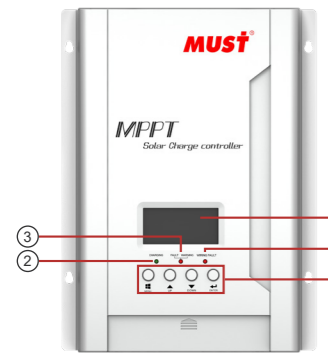
**Features**

- 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 efficienQf 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

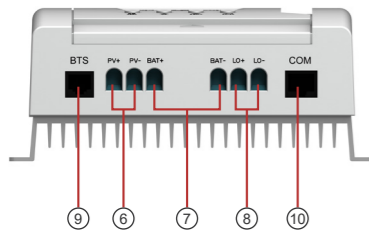
**Introduction**

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.

**Back panel printing description**

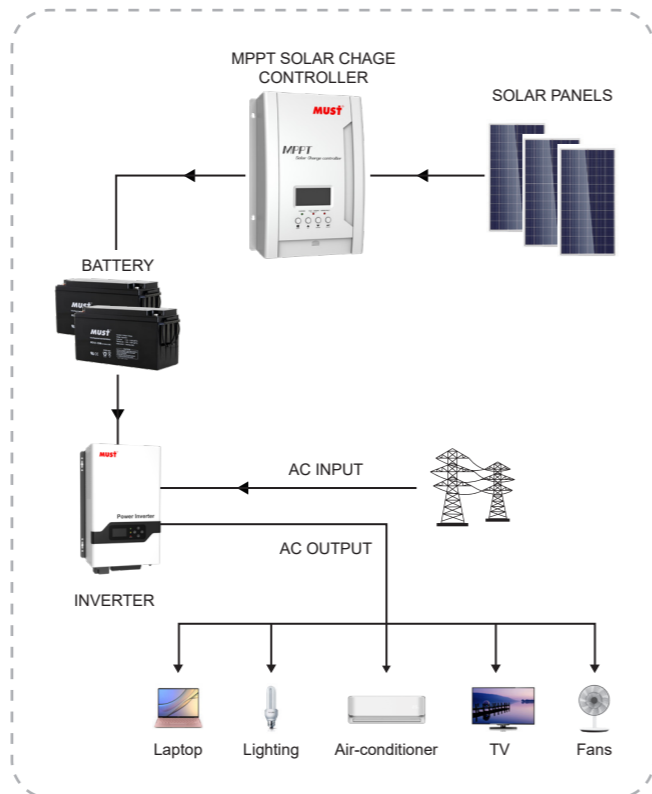


1. LCD Display
2. Charging Indicator
3. Fault and warning indicator
4. Wiring fault indicator
5. Operation button



6. PV connectors
7. Battery connectors
8. Load connectors
9. Battery temperature sensor terminal
10. RS485 communication port

**Solar system connection**



**Specification**

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	12 Volt-432W 24 Volt-864W	12 Volt-576W 24 Volt-1152W
BATTERY	Charging Set Points	Absorption, Float	
	Flooded Battery	14.2V/28.4V	13.7V/27.4V
	AGM/GEL/LEAD (Default)	14.4V/28.8V	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 Conefficient	-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	
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	Mounting	Wall mount	
	Machine Dimension (W*H*D)	187*255*72mm	
	Package Dimension (W*H*D)	/	
	G.W	/	
	N.W	/	
OTHER	Environmental Rating	Indoor	
	Enclosure	IP30	
	Operation Temperature Range	-10~50°C	
	Ambient Humidity	0~90% relative humidity (non-condensing)	
	Altitude	≤3000m	

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