

MPPT SOLAR CHARGE CONTROLLER

PC1800A Series

30A, 40A | 12V,24V

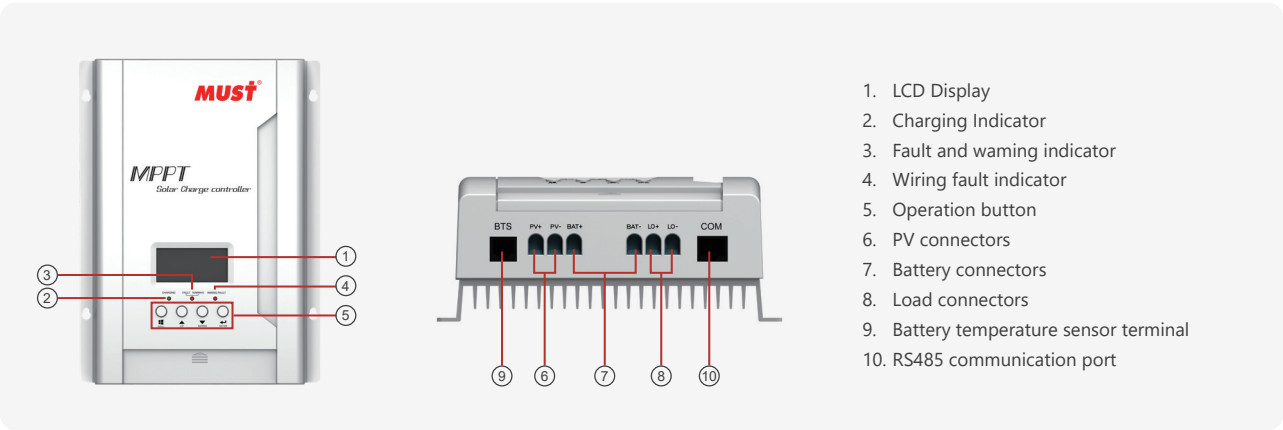
This solar charge controller is an advanced solar charger with maximum power point tracking. Applying intelligent MPPT algorithm, it allows solar charge controller to extract maximum power from solar arrays by finding the maximum power point of the array. The MPPT battery charging process has been optimized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



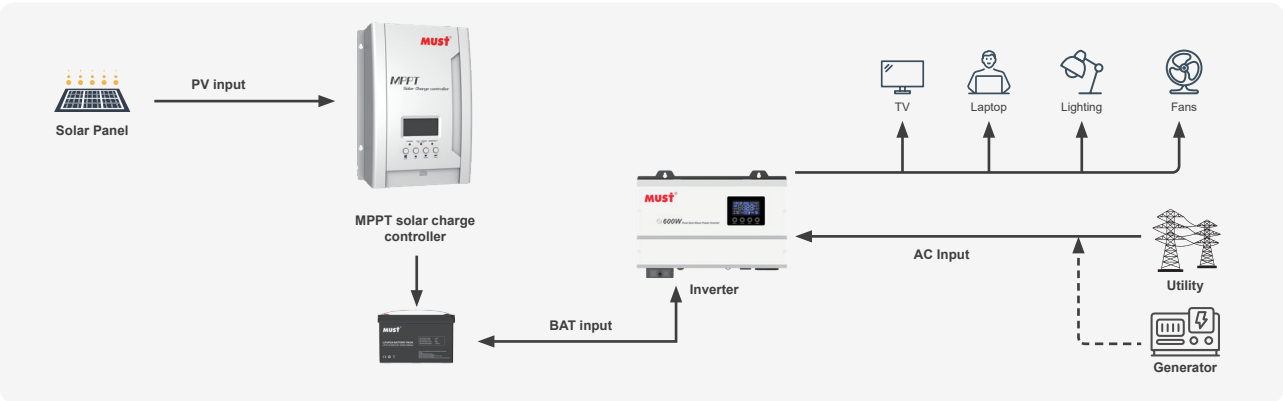
- Intelligent Maximum Power Point Tracking technology increases efficiency 25%~30%
- Compatible for PV systems in 12V,or24V
- Three-stage charging optimizes battery performance
- Maximum charging current up to 30A/40A
- Advanced MPPT technology,with efficient no less than 99%
- Maximum DC- DC conversion 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 | | | |
| Operating 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