

# PCM-50CV

Professional Ultra High Volt MPPT Solar Charger



**50A**

## MAIN FEATURES

- Ultra high voltage input 480VDC!
- Supports high voltage battery systems 48V/72V/96V/120V only
- Large array PV array support up to 8KW\*
- Maximum charging current up to 50A
- Programmable charging
- Support Wet, AGM, and Gel batteries
- Allows peer data parallel connections up to 16 units
- 4 LEDs and large LCD screen to display device modes and important system information
- Integrated Battery Monitor to display energy information in battery\*\*
- Data logging storage up to 90 days
- Built-in temperature compensation capability
- Over-temp, PV input overload, reverse current, battery overcharge/undercharge protection
- 2 sets of built-in Auxiliary Relays for device control
- Manual or automatic battery equalization.

\*based on max equalization charge on a 120v battery bank at 160V.  
 \*\*This feature requires optional accessory 500A/50mv shunt to activate. Please contact us for more detail.

**MAX 480VDC !**



**HIGH PV INPUT**

**8KW max**

**LARGE PV SUPPORT**



**48, 72, 96, 120VDC**

**HIGH-VOLT BATTERY SUPPORT**



**2X AUX RELAYS**

**PCM-50CV**

## ELECTRICAL SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| MPPT Range @ System Voltage | 64-, 96-, 128-, 160-384VDC @ 48V, 72V, 96V, 120V   |
| Max PV Input Voltage        | 480VDC   |
| Max PV Input Current        | 40A  |
| Max PV Input Power          | up to 8000W  |
| Recommended Battery Type    | Flooded, GEL, or AGM Lead Acid   |
| Nominal Battery Voltage     | 48V, 72V, 96V, 120VDC  |
| Max Charging Current        | <b>50A</b>   |
| Standby Power               | <4W  |
| Charging Schemes            | Bulk, Absorption, Float, Auto/Manual Equalization  |
| Battery Temp. Compensation  | Built-In, -5.0mV/°C/cell   |
| Protections                 | Over Temperature, PV Overload, Reverse Current, Overcharge/Undercharge   |
| LCD Indicator               | PV Input Voltage/Current/Power, Battery Voltage/Current/Temp/SOC, System Date/Time/Temp, Voltage Setting, Data Log Information |
| LED Indicator               | 4, Ready/Charge/Equal/Fault  |
| Parallel Connections        | Yes, Up to 16 Units  |
| Data Logging                | Built-In, Up to 90 Days  |
| Auxiliary Relays            | 2 Sets, 3A/50VDC   |

## GENERAL SPECIFICATIONS

|                         |                               |
|-------------------------|-------------------------------|
| Certification / EMC     | CE / EN61000-6-1, EN61000-6-3 |
| Operating/Storage Temp. | -20°C~50°C/ -40°C~70°C        |
| Enclosure Type          | Indoor, IP20                  |
| Working Humidity        | ~95%RH Max Non-Condensing     |
| Dimension               | 426*265*167mm                 |
| Weight                  | 10.6Kg                        |