

# MPPT CONTROLLERS



PCM-5048



PCM-8048

ELECTRICAL SPECIFICATIONS		
MPPT Range @ System Voltage	16/32/48/64~112VDC@12/24/36/48V	
Max PV Input Voltage	140VDC (Open Circuit)	
Max PV Input Current	40A	70A
Max PV Input Power	3400W	5400W
Recommended Battery Type	Flooded, GEL, or AGM Lead Acid	
Nominal Battery Voltage	12/24/36/48V	
Max Charging Current	50A	80A
Standby Power	<2W	
Charging Schemes	Bulk, Absorption, Float, Auto/Manual Equalization	
Battery Temp. Compensation	Built-In, -5.0mV/°C/cell	
Protections	Over Temperature, Reverse Polarity, Reverse Current, Overcharge/Overdischarge	
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	268*196*147mm	415*225*147mm
Weight	4.3Kg	7.1Kg

## KEY FEATURES

- Integrated **Maximum Power Point Tracking (MPPT)** capability increases performance by 25~30%.
- Compatible for PV projects in 12, 24 or 48V systems.
- Up to 4-stage charging schemes.
- Support wide range of lead-acid batteries including wet, AGM, and gel batteries.
- **Large array PV array support up to 5.4KW.**
- Maximum charging current up to **80A.**
- Allows peer parallel connections up to **16 units** via communication ports.
- 4 LEDs and large LCD screen to display device modes and important system information (PV power input, input current, battery voltage, battery SOC, system temperature, and voltage setting).
- Battery energy monitor built-in to calculate energy left in battery for consumption.
- Data logging functionality keeps energy harvest information and battery SOC/Ahr/Whr data up to 90 days.
- System protections include: over-temperature, battery reverse polarity, PV input overload, reverse current, battery overcharge/overdischarge.
- Built-in temperature compensation capability.
- 2 sets of built-in Auxiliary Relays for device control.
- Manual or automatic battery equalization.
- Optional 50mv/500A external shunt is required to facilitate BVS (battery voltage sensing).
- **High input voltage models (up to 240VDC) are also available in 40A or 80A. Contact us for more info.**

BATTERY TYPE	BATTERY VOLTAGE	EQUALIZATION VOLTAGE RANGE	FACTORY SETTING
FLOODED BATTERY	12V	14.7~16.4V	15.6V
	24V	29.4~32.8V	31.2V
	36V	44.1~49.2V	46.8V
	48V	58.8~65.6V	62.4V

\*Product specifications are subject to change without prior notice. MPP Solar is a registered trademark of MPP Solar Inc.