

# CM-MPPT Solar Charge Controller

(12-48V/30A, 40A, 50A, 60A, 80A, 100A)

## MAIN FEATURES



High precision and high efficiency with DSP chip control



Display technology parameter with 7 inch touch screen



RS485 remote communication and data transmission(optional)



## Product Specifications

Model:CM-		30A	40A	50A	60A	80A	100A
Charging Mode		MPPT Automatic Maximum Power Point Tracking					
Charging Method		Three stages: Constant Current (MPPT), Balanced Charging, Floating Charge					
System Type	12V/24V/48V	Automatic Identification/Manual Setting					
System Identification Voltage Range	12V System	DC9V-DC15V					
	24V System	DC18V-DC30V					
	48V System	DC36V-DC60V					
Soft Start Time	12V/24V/48V	≤10s					
Dynamic Response Recovery Time	12V/24V/48V	≤500us					
Static Power	12V/24V/48V	≤2W					
Machine Efficiency	12V/24V/48V	≥96.5%					
PV Module Utilization	12V/24V/48V	≤99%					
<b>Input Characteristics</b>							
MPPT Operating Voltage Range	12V System	DC18V-DC150V					
	24V System	DC34V-DC150V					
	48V System	DC65V-DC150V					
Maximum Solar Panel Input Power	12V System	420W	570W	700W	900W	1100W	1400W
	24V System	840W	1130W	1400W	1700W	2200W	2800W
	48V System	1650W	2270W	2800W	3400W	4400W	5600W
<b>Output Characteristics</b>							
Optional Battery Type (Default is lead-acid maintenance-free battery)	12V/24V/48V	Lead-acid maintenance-free Battery, Gel Battery, Lithium Battery (Can also be customized for other types of battery)					
Current Limiting Protection	12V/24V/48V	32A	42A	52A	62A	82A	102A
Temperature Coefficient	12V/24V/48V	± 0.02%/°C					
Temperature Compensation	12V/24V/48V	14.2V-(Maximum Temperature -25°C)*0.3					
Output Regulation Accuracy	12V/24V/48V	≤±15%					
<b>Protection</b>	Input Low Voltage Protection	Reference Input Characteristics					
	Input High Voltage Protection	Reference Input Characteristics					
	Short Circuit Protection	After 5 trial starts will enter the protection state, Restart Recovery					
	Temperature Protection	90°C					
	Temperature Rise Protection	Reduce Power Output When Exceed 85°C					
<b>Other Parameters</b>	Noise	≤50dB					
	Heat Dissipation Method	Forced air cooling, fan speed is adjusted by temperature					
	Mechanical Protection Type	IP21					
	Humidity	0-90%RH (No condensation)					
<b>PV Module Configuration</b>	System Battery Voltage	PV module load voltage (Recommended Value)					
	12V System	18V-60V (30V module*1 string, 36V module*1 string)					
	24V System	36V-72V (30V module*2 string, 36V module*2 string)					
	48V System	72V-144V (30V module*3 string, 36V module*3 string)					