

### SERIES MODELS

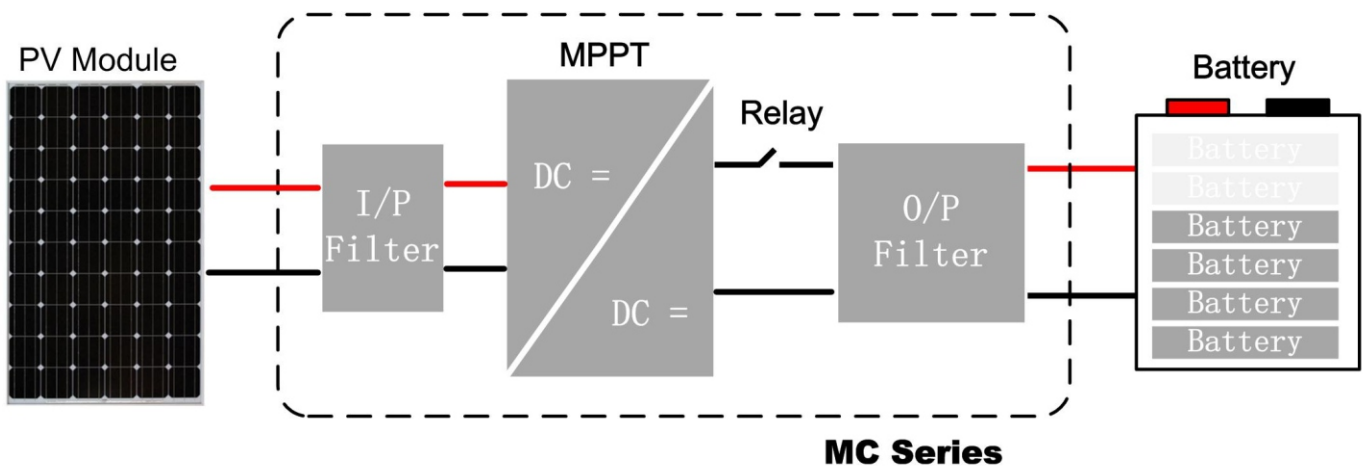
MPPT Solar Charger Controller	Sunwins MC-30F	Sunwins MC-30N	Sunwins MC-40F	Sunwins MC-40N
	Sunwins MC-50F	Sunwins MC-50N	Sunwins MC-60F	Sunwins MC-60N
	Sunwins MC-70N	Sunwins MC-80N		

### PRODUCT FEATURES



- Flexible for 12/24/48V System
- Fan cooling
- Advanced MPPT Technology 99%
- Multiphase synchronous rectification technology
- Peak conversion efficiency of 98%
- Nominal maximum solar input is DC 150V
- Multifunction LCD displays system data and status
- Three stages charging optimizes battery performance
- PV array short circuit Protection
- PV over current Protection
- PV over voltage Protection
- PV reverse polarity Protection
- Battery reverse polarity Protection
- Over charging Protection
- Overheating protection

### BLOCK DIAGRAM



### PRODUCT CERTIFICATION



# PART V / SOLAR CHARGER CONTROLLER SUNWINS MC SERIES II



## TECHNICAL DATA

	Sunwins MC-70N	Sunwins MC-80N
<b>ELECTRICAL</b>		
Solar system voltage	12V / 24V / 48V Flexible	
PV Operating Voltage	17~150 VDC@12V / 34~150VDC@24V / 60~150VDC@48V	
Maximum PV Input Power	12V 1000W	12V 1200W
	24V 2000W	24V 2300W
	48V 4000W	48V 4600W
Maximum Charging Current	70 A	80 A
Maximum DC Load Current	60 A	
Self Consumption	3W	
Conversion Efficiency	98.5%	
Protection	Overload, Short circuit, High voltage, High temperature Protection	
<b>BATTERY</b>		
Connected Battery Type	Sealed AGM Gel Flooded	
Charging Algorithm	4-stage: Bulk, Absorption, Float, Equalize	
Bulk Charge Voltage	Sealed: 14.4V AGM Gel:14.2V Flooded:14.6V Custom:10-17V	
Float Charge Voltage	Sealed / Gel / AGM : 13.7V Flood:13.6V Custom:10-17V	
Equalize Charge Voltage	Sealed:14.6V AGM:14.8V Flooded:14.9V Custom:10-17V	
Low Voltage Reconnect Voltage	10.2 V	
Low Voltage Disconnect Voltage	9V	
Temperature Compensation	-5mV / °C / 2V with BTS	
<b>COMMUNICATION</b>		
Communication Port	Rs485 / 232 / Ethernet with Online monitor system, GPRS Optional	
<b>PHYSICAL</b>		
Net Weight	7.2 kg	
Gross Weight	7.6 kg	
Dimension,W x H x D	353*227*110 mm	
Cooling	Heatsink cooling	
Protection Degree	IP 54	
<b>ENVIRONMENT</b>		
Relative Humidity	100% non-condensing	
Operating Temperature	-25°C to 60°C (Derating from 45°C)	
Storage Temperature	-40°C to 80°C	
Standard Warranty(years)	2 years	

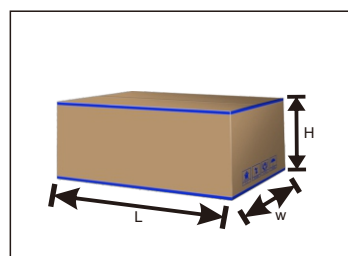
\* Product specifications are subject to change without further notice

Version : 2.0

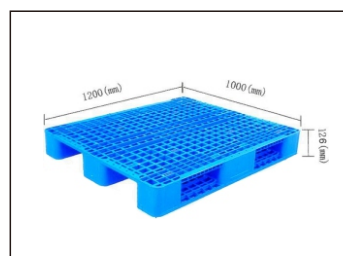
## PACKING SIZES



Product Size



Product Packing Size

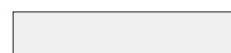


Standard Pallet Size

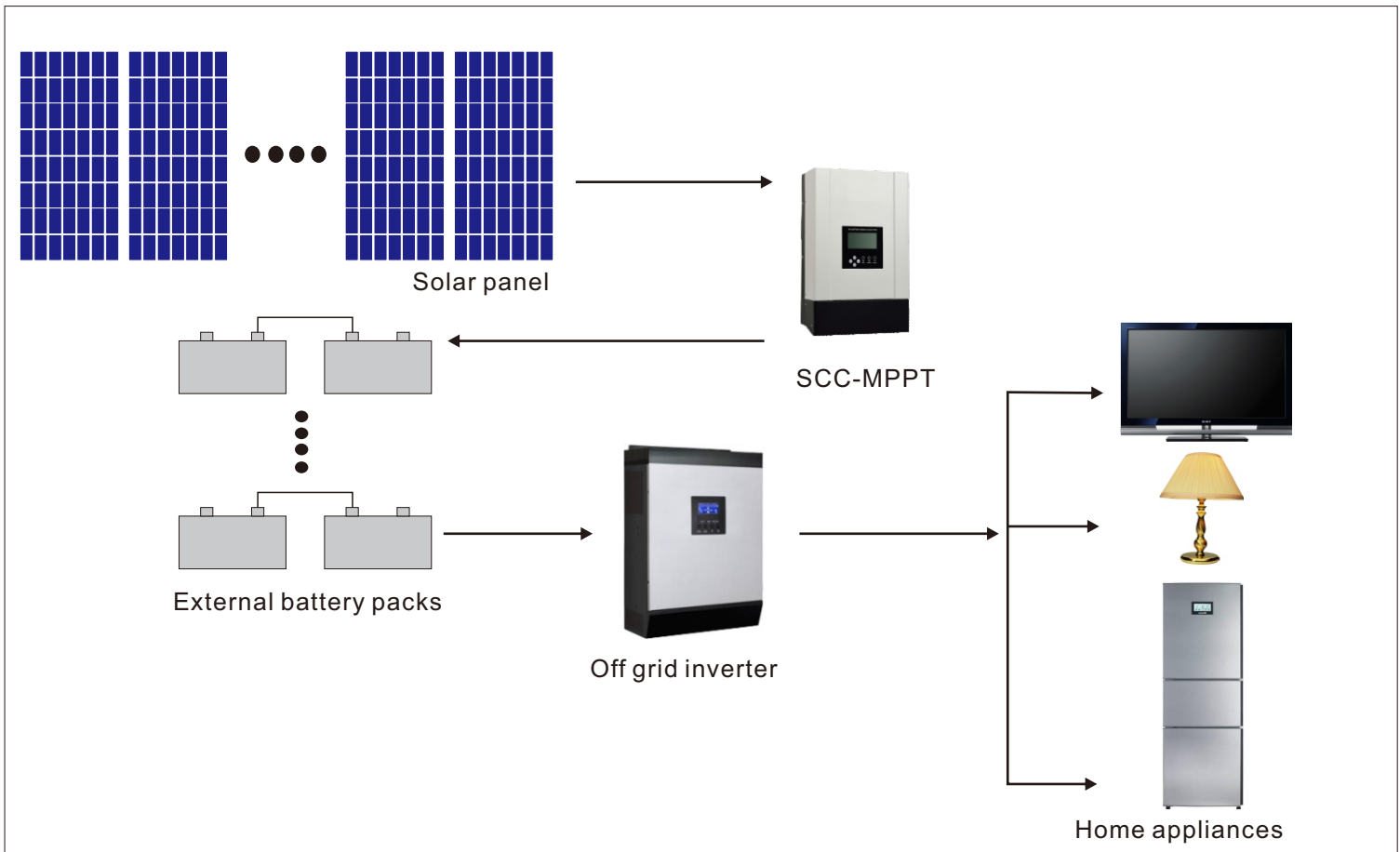


Pallet Packing Model

## COLOR OPTIONS



## DIFFERENT WORKING MODE



## SYSTEM SOLUTION & APPLICATION CASES



We can provide :

- \* 1kw to 200kw on-grid / off-grid / storage energy solutions.
- \* Professional design and good quality.
- \* Ensure safe and convenient construction.
- \* Easy to maintain and convenient to replace.
- \* Wide applications range for different environments.

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