

# MPPT SOLAR CHARGE CONTROLLER

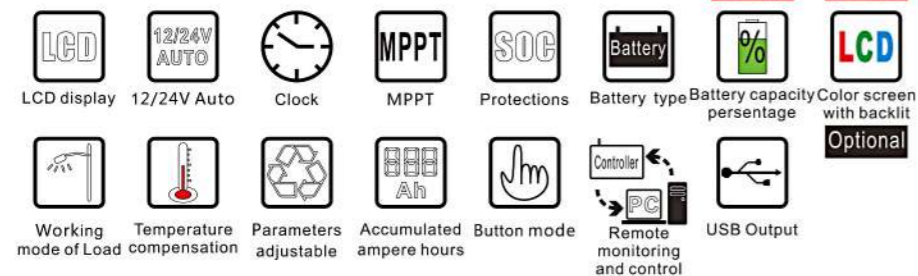
ISO CE RoHs

**MPPT1** 系列产品采用DC/DC转换技术和MCU技术。它可以智能地调整太阳能电池板阵列的工作点，使太阳能电池板阵列实现最大功率输出。当外部条件发生变化时，MPPT控制器基于MCU理论来跟踪太阳能电池板的最大工作点，以提高太阳能电池板的使用效率，降低太阳能发电成本。与普通太阳能充电控制器相比，MPPT可以将太阳能电池板的输出效率提高5%至30%（输出增加的比例受太阳能电池板属性，环境温度和照明条件等因素的影响）。



MPPT1 series products adopts DC/DC converting technology and MCU technology. It can adjust the working point of the solar panels array intelligently to make the solar panels array realize the maximum power output. When the external condition changes, MPPT controller bases on the MCU theory to track the maximum working point of the solar panels, this can improve the using efficiency of the solar panels and decrease the solar generating cost. Compared with average solar charge controllers, MPPT can improve the output efficiency of the solar panels by 5% to 30% (the output increasing proportion affected by the factors such as the attribute of the solar panels, environmental temperature and lighting conditions).

## Functions:



## 产品特点:

1. DSP处理器架构确保控制器的高速和性能
2. MPPT效率>99%，峰值转换效率>98%
3. 12V / 24V自动识别
4. PV光伏输入：100V
5. 四阶段充电模式
6. 保护：光伏阵列短路，太阳能板反接保护，电池反接，负载过载保护，输出短路保护
7. USB输出
8. LCD显示

## Features:

1. DSP processors architecture ensures high speed and performance
2. MPPT efficiency>99%, Peak conversion efficiency>98%
3. 12V/24V auto work
4. PV input:100V max
5. Four-stages charging mode
6. Protection:PV array short circuit,PV reverse polarity, Battery reverse, polarity,Over charging,Output short circuit
7. USB output
8. LCD display

## MPPT1 SERIES CONTROLLERS

Model: MPPT110D



额定电流: 12/24V自动识别  
额定电压: 10A

Rated Voltage:12V24V Auto  
Rated Current:10A

Model: MPPT120D



额定电流: 12/24V自动识别  
额定电压: 20A

Rated Voltage:12V24V Auto  
Rated Current:20A

Model: MPPT130D



额定电流: 12/24V自动识别  
额定电压: 30A

Rated Voltage:12V24V Auto  
Rated Current:30A

Model: MPPT140D



额定电流: 12/24V自动识别  
额定电压: 40A

Rated Voltage:12V24V Auto  
Rated Current:40A

# MPPT1 Series Solar charge controller



房车, 船等电力供应系统/  
RV, boat & field power supply  
solar system



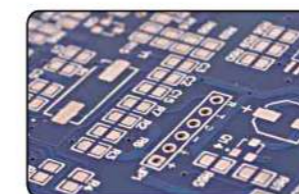
离网型家用系统/  
Off-grid  
home solar system



农场牧场太阳能发电系统/  
Farm solar generation system

## Technical Data

型号/Model	MPPT110D	MPPT120D	MPPT130D	MPPT140D
系统电压/ System voltage	12V/24V Auto			
蓄电池电压范围/ Battery voltage range	9~32V			
最大充电电流/ Max charging current	10A	20A	30A	40A
最大输入电压/ Max PV voltage	100V			
蓄电池类型/Battery type	自定义, 开口电池, 密封电池, 胶体电池, 钒酸铁锂电池, 三元锂电池/ User,Flooded,AGM,GEL,LifePO4,Lithium			
均衡充电/ Equalize charge	铅酸免维护/SLD: 14.6V, 胶体/GEL: null, 钒酸液体/FLD: 14.8V			
吸收充电/ Absorption charge	铅酸免维护/SLD: 14.4V, 胶体/GEL: 14.2V, 钒酸液体/FLD: 14.6V			
浮充/Float charge	铅酸免维护/胶体/钒酸液体/ GEL,SLD,FLD: 13.8V			
欠压保护/(LVD) Low voltage disconnection	钒酸免维护/胶体/钒酸液体/ GEL,SLD,FLD: 10.8V			
欠压恢复/(LVR) Low voltage reconnection	钒酸免维护/胶体/钒酸液体/ GEL,SLD,FLD: 12.6V			
空载损耗/ No load consumption	≤40mA			
过压保护/ High voltage disconnect	16V			
均衡充电时间/ Equalize charge time	2hours			
吸收充电时间/ Absorption charge time	2hours			
光控点电压/ light control voltage	5V			
温度补偿/ Temperature compensation	-4mV/ cell/ °C			
充电回路压降/ Charge loop voltage drop	≤0.29V			
放电回路压降/ Discharge loop voltage drop	≤0.16V			
液晶屏温度范围/ LCD screen temperature range	-20 ~ +70 °C			
工作环境温度/ Working temperature	-20 ~ +55 °C			
存储环境温度/ storage temperature	-30 ~ +80 °C			
湿度/Humidity	0 ~ 90%, 无凝露/nocondensation			
接地方式/Gronding	正极接地/Positive grounding			



Optimized circuit design



Selection of quality materials



SCM accurate control