



Solar Street Light Charge Controller 太阳能路灯控制器

PC1024L~PC3048L



- Build-in industrial micro controller.
 - Big LCD display, all adjustable parameter.
 - Fully 4-stage PWM charge management.
 - Build-in short-circuit protection, open-circuit protection, reverse protection, over-load protection.
 - Dual mosfet Reverse current protection, low heat production.
 - 2 USB port output.
 - Electronic protection
 - Standby Loss less than 5mA
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- 采用工业级主控芯片。
 - 大屏幕LCD 显示，充放电参数可调。
 - 完整的4 阶段PWM 充电管理。
 - 内置过流/短路保护，开路保护，反接保护，均为自恢复型，不损伤控制器。
 - 双MOS 防倒灌电路，超低发热量。
 - 2 个USB端口输出
 - 电子保护
 - 待机损耗小于5毫安

Product Introduction 产品介绍

This series solar charge controller is based on PWM charging with common positive electrode, all-digital technology and LCD display design, automatic operation mode, used for the wide range of applications. Such as: solar street light, home power systems, traffic lights, road monitoring, small power plants, automotive systems.

该系列产品基于串联型脉宽调制（ PWM ）充电方式，共正极设计，采用全数字化技术和液晶显示屏设计，全自动运行模式，应用范围广泛。如：太阳能路灯，家庭供电系统，交通指示灯、道路监控、小型电站、汽车系统等。

Technical Specifications 技术参数

Model	PC1024L	PC2024L	PC3024L	PC2048L	PC3048L
Rated charging current	10A	20A	30A	20A	30A
Rated discharging current	10A	20A	30A	20A	30A
Short-current protection		40A			60A
System voltage		12V/24V Auto			48V
Over current protection		<1.3 maintain for 60s			
		<1.6 maintain for 5s			
		>1.6 shut down immediately			
Stand-by lost		<5mA			15mA
Charge voltage drop			≤0.26V		
Discharge voltage drop			≤0.15V		
Max solar panel voltage		50V			100V
Operating temperature			-20°C to +60°C		
Equalize charging voltage		14.8V			59.2V
Bulk charging voltage		14.5V			58.0V
Acceptance charging voltage		14.2V			56.8V
Float charging		13.8V			55.2V
Charge return voltage		13.2V			52.8V
Discharge stop voltage		11.2V			44.8V
Discharge return voltage		12.6V			50.4V
USB output			5V 3A		
Control mode			PWM(Pulse Width Modulation)		
Maximum wire size			12AWG		
Size		133x70x35mm			140x95x33mm
Weight		180g			220g

* Remarks:Products specifications are subject to change without notice.



MPPT Solar Charge Controller

MPPT 太阳能控制器

MPPT20-100~MPPT50-150

- Advanced MPPT technology, with efficiency no less than 99.5%
- 12V/24V system Automatic Recognition , users can use it in different system conveniently
- Ultra-fast tracking speed and guaranteed tracking efficiency
- Accurately recognizing and tracking of multiple power point
- Real-time energy statistics function
- With RS485 communication interface
- 先进的MPPT技术，效率不低于99.5%
- 12V/24V系统自动识别，方便用户用于不同的系统
- 超快的跟踪速度，并保证跟踪效率
- 准确识别和多种功率点跟踪
- 实时能量统计功能
- 带RS485通讯接口,可提供通讯协议,方便客户统一集成管理

Technical Specifications 技术参数

SunSaver Charge Controller	MPPT20-100	MPPT30-150	MPPT40-150	MPPT50-150
Peak efficiency		≥98%		
System Voltage		12Vdc/24Vdc(Automatic)		
Size, D X W X H (mm)	249x144x105		289x189x113	
Net Weight (Kgs)	1.30		2.50	
PV Input(DC)				
Max. PV Input Open Circuit Voltage(Voc)	100Vdc		150Vdc	
Nominal PV Input Power	12Vdc 24Vdc	260W 520W	390W 780W	\$20W 1040W
Battery				
Nominal Battery Voltage		12Vdc/24Vdc(Automatic)		
Battery Voltage Range	12Vdc 24Vdc		9Vdc-15Vdc 18Vdc-30Vdc	
Rated Charging Current	20A	30A	40A	50A
Battery Type	Flooded, Nickel Cadmium, Sealed Lead Acid, Gel(Default) <Other type batteries can be defined>			
Charge Method		3-Stage Charging: Bulk, Absorption, Float		
Temperature Compensation Coefficient		-3 mV / °C / Cell(25°C [77°F]Ref.)		
Charging Set-Points		Absorption, Float		
USB Charging Port		2 Ports, DC5V 3A		
Protection				
Solar Input	Overload, short-circuit, low voltage, high voltage warning, reverse polarity, high temperature, nighttime reverse current			
Load Output		Overload, short-circuit, reverse polarity, high temperature		
Battery		Reverse polarity		
Interface				
Data & Communications		RS485		
General Data				
Cooling Method		Auto Cool		
Display		LCD Display		
Language		English, Chinese		
Self-Consumption	12Vdc 24Vdc		20 mA 10 mA	
Environment				
Protection Grade		IP30		
Operating Temperature		-30°C to +60°C		
Storage Temperature		-40°C to +80°C		
Altitude		Up to 3000m		
Humidity		0~95%, no condensation		

* Remarks:Products specifications are subject to change without notice.



MPPT Solar Charge Controller

MPPT太阳能控制器



MPPT20-150~MPPT60-150

- Advanced MPPT technology, with efficiency no less than 99.5%
- 12V/24V/36V/48V system Automatic Recognition, users can use it in different system conveniently
- Excellent performance at sunrise and low solar insolation levels
- Intelligent battery management to improve battery life
- Real-time energy statistics function
- With RS485 communication interface
- 先进的MPPT技术，效率不低于99.5%
- 12V/24V/36V/48V系统自动识别，方便用户用于不同的系统
- 在日出和低光照下的卓越性能
- 智能电池管理可延长电池寿命
- 实时能量统计功能
- 带RS485通讯接口,可提供通讯协议,方便客户统一集成管理

Technical Specifications 技术参数

SunSmart Charge Controller	MPPT20-150	MPPT30-150	MPPT40-150	MPPT50-150	MPPT60-150
Peak efficiency			≥98%		
System Voltage		12Vdc/24Vdc/36Vdc/48Vdc(Automatic)			
Size, D X W X H (mm)		289x204x101		306x210x120	
Net Weight (Kgs)	2.40			2.60	
PV Input(DC)					
Max. PV Input Open Circuit Voltage(Voc)			150Vdc		
Nominal PV Input Power	12Vdc 24Vdc 36Vdc 48Vdc	260W 520W 780W 1040W	390W 780W 1170W 1560W	520W 1040W 1560W 2080W	650W 1300W 1950W 2600W
Battery					
Nominal Battery Voltage			12Vdc/24Vdc/36Vdc/48Vdc(Automatic)		
Battery Voltage Range	12Vdc 24Vdc 36Vdc 48Vdc		9Vdc-15Vdc 18Vdc-30Vdc 32Vdc-40Vdc 42Vdc-60Vdc		
Rated Charging Current	20A	30A	40A	50A	60A
Battery Type		Flooded, Sealed Lead Acid, Gel(Default) <Other type batteries can be defined>			
Charge Method			3-Stage Charging: Bulk, Absorption, Float		
Temperature Compensation Coefficient			-3 mV / °C / Cell(25°C [77F]Ref.)		
Charging Set-Points			Absorption, Float		
Protection					
Solar Input		Overload, short-circuit, low voltage, high voltage warning, reverse polarity, high temperature, nighttime reverse current			
Load Output			Overload, short-circuit, reverse polarity, high temperature		
Battery			Reverse polarity		
Interface					
Data & Communications			RS485		
General Data					
Cooling Method			Fan		
Display			LCD Display		
Language			English, Chinese		
Max. DC Load Current			40A		
Self-Consumption			1.75W - 2.5W		
Environment					
Protection Grade			IP25		
Operating Temperature			-30°C to +60°C		
Storage Temperature			-40°C to +80°C		
Altitude			Up to 3000m		
Humidity			0~95%, no condensation		

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Solar System Charge Controller

太阳能系统控制器



PC5048S

PC3024S

PC2024S~PC6048S

- Image of LCD graphic symbol
- Simple button operation
- Automatic Identification System Voltage level
- Intelligent PWM charge mode
- Automatic Temperature Compensation
- Adjustable charge-discharge control parameters
- Settable Operating mode of Load
- Overload, Short Circuit Protection
- Remote monitoring and control function (custom)
- Battery reverse-discharge protection
- Battery Low Voltage Disconnection (LVD)
- Battery reverse connection protection
- Accumulated function of charge and discharge Ampere hours
- LCD图形符号显示
- 简单的按键操作
- 自动识别系统电压等级
- 智能PWM充电模式
- 自动温度补偿
- 可调节充、放电控制参数
- 负载可设置的操作模式
- 过载，短路保护
- 电池反向放电保护
- 电池低电压断开（LVD）
- 电池反接保护
- 累计电荷的功能和放电安培小时

Product Introduction 产品介绍

This series solar system charge controller is a kind of intelligent, multi-purpose solar charge and discharge controller. This series use the fixed LCD display, with a very friendly interface; various control parameters can be flexibly set, fully meet your various application requirements.

该系列太阳能系统充电控制器是一种智能型，多用途太阳能充、放电控制器。该系列使用固定的LCD显示屏，具有非常友好的操作界面；各种参数可灵活设定，充分满足您的各种应用需求。

Technical Specifications 技术参数

Model	PC2024S	PC3024S	PC5024S	PC6024S	PC2048S	PC3048S	PC5048S	PC6048S
Rated charging current	20A	30A	50A	60A	20A	30A	50A	60A
Rated discharging current	20A	30A	50A	60A	20A	30A	50A	60A
Short-current protection			40A				60A	
System voltage		12V/24V Auto					48V	
Over current protection					<1.3 maintain for 60s			
					<1.6 maintain for 5s			
					>1.6 shut down immediately			
Charge voltage drop					≤0.26V			
Discharge voltage drop					≤0.15V			
Max solar panel voltage			<50V				<100V	
Operating temperature					-20°C to +60°C			
Equalize charging voltage			14.8V/29.6V				59.2V	
Bulk charging voltage			14.5V/29.0V				58.0V	
Acceptance charging voltage			14.2V/28.4V				56.8V	
Float charging			13.7V/27.4V				55.8V	
Charge return voltage			13.2V/26.4V				52.8V	
Discharge stop voltage			11.2V/22.4V				44.8V	
Discharge return voltage			12.6V/25.2V				50.4V	
Control mode				PWM(Pulse Width Modulation)				
Maximum wire size					>7AWG			
Size/weight					188x95x48mm/220g			

* Remarks:Products specifications are subject to change without notice.