# MPPT 风光互补路灯控制器 wind & solar hvbrid street-light controller

## 产品介绍 PRODUCT

MPPT 风光互补路灯控制器是国内首次将 MPPT (最大功率追踪)技术应用于小型风力发电机上,此技术的成功应用,极大提高了低风速情况下的充电效率,明显高于传统 PWM 的充电方式近 30%。真正地解决了小型风机在常年低风速下不充电的难题。特别适合用于 200W 到 600W 之间的水平轴、垂直轴小型风力发电机。同时,高端型还配备市电互补功能、数据通讯功能等。该款控制器兼容型强,功能强大,其经过多年的实践案例验证,具有高可靠性与稳定性等特点。产品可应用于道路照明、公路监控(24 小时不间断供电)、室外广告、家庭用户等系统。

MPPT Wind solar hybrid street-lighting controller is the firstly apply MPPT technology for the small power wind generator in china. With the application of this technology, the charge efficiency has vastly improved under the situation of low-wind , and obvious exceed the traditional PWM charging mode of 30% .Solved the charging efficiency of the low-power wind generator. Especially apply to the horizontal and vertical low-power wind generator of 200W to 600W.Meanwhile,the advanced wind/solar hybrid controller has functions of electricity backup, data communication and so on. This controller has strong compatibility and a great many functions, And many years, practice has proved it has high reliable and stability. It can be used to the street lighting, monitoring system ,outdoor advertisement, and home user and so on.



友好型风光互补路灯控制器

#### 性能特点

- ▶ 数字化设计,模块无触点结构,性能稳定可靠。
- MPPT 技术,实时扫描捕捉风机最大功率点,利用风能最大化。(选配功能)
- ▶ 可实现风机低压充电,充电取样点,此值用户可设置。(选配功能)
- 12V/24V 自动识别,通用性强。
- 200W-500W 系列通用,兼容各类系统。
- 液晶显示运行数据,异常信息显示。
- 具有过充、过放、过载、短路、蓄电池防反接、太阳能防反接、开路、风机过电流/过转速/过风速刹车、蓄电池掉电、防雷、太阳能夜间防反充等 完善的保护功能。
- 双路输出,具有光控、时控、24小时常输出等输出方式。
- 用户可修改重设定输出方式、电压保护点、升压充电点、光控电压点、亮 灯四时段时间(小时)等系统参数。
- 市电自动切换功能。(选配功能)
- 数据通讯,可 GPRS 无线数据传输,配备上位机软件。(选配功能)

### **PERFORMANCE FEATURES**

- MPPT technology, maximum power point tracking method to optimize using the wind energy.
- Boost circuit designed. User can set this voltage parameter.
- 12V/24V System Automatic Recognition function.
- Be able to use for 200W-600W wind turbine with high compatibility.
- Digital design, module structure, stable and reliable
- With perfect protection, such as over-charge, over-discharge, open circuit, anti-reverse connection, overload, short-circuit, PMG over speed brake, over current brake, solar anti-reverse charging on night.
- Dual-line output, light sensor and timer functions, morning lighting, constantly output 24hours.
- User can adjust setting of system parameters as voltage protection point, boost voltage, light sensor voltage, timer. and so on.
- Utility Power switch function (optional)
- Monitor software offer to transfer data communication (optional)



Excellent wind&solar hybrid controller





可选配件

#### **OPTIONAL ACCESSORIES**

- 开关电源(SMPS)
- 监控软件及安装光盘(Monitoring Software and CD)
- RS232 转 RS485 数据线(RS232-RS485 converter)
- RS232 数据线(RS232 wire)
- RS232转USB数据线(RS232-USB Converter)
- GPRS 无线数据传输



系统参数 System Capability	
风机额定功率范围 Rated wind-turbine Power	200W to 600W
光伏电池板最大功率 PV Max. power	150W / 300W
蓄电池电压 Rated battery voltage	12V/24V Auto configuration
每路输出最大电流 Output current Max.	10A
每路输出最大功率 Output power Max.	120W / 150W
显示方式 Indication	LED or LCD
电性能参数 Performance	
静态损耗 static power consumption	$\leq 25 \text{mA}$ (LED); $\leq 35 \text{mA}$ (LCD)
标准通信接口 Data-transfer	RS232 to RS485, RJ45 converter
工作环境温度 Operating temperature	-35℃ to +55℃
储藏温度 Store temperature	-35℃ to +80℃
环境湿度 Humidity	10% - 90% (NC)
温度补偿 Temperature compensation	-35mV/°C (25°C ref.)
工作海拔高度 Altitude	$\leqslant$ 5000 meter
防护等级 Protection class	IP55
净重 Net-weight	1.2 kg