

离网光伏产品系列

OFF-GRID PV PRODUCTS SERIES

太阳能光伏控制器

Solar controller



PWM型控制器 PWM controller

产品简介 Introduction

PWM光伏控制器适用于中小型离网光伏系统。采用最先进的数字技术设计，全自动运行。它的脉宽调制（PWM）式的蓄电池充电方式将大大提高蓄电池的寿命。其全面的保护功能可以避免由于安装错误和系统故障而导致的控制器损坏。

PWM controller for small and medium sized photovoltaic off-grid PV systems. Using the most advanced digital technology design, fully automatic operation. Its pulse width modulation (PWM) type battery charging method will greatly enhance battery life. Its comprehensive protection function prevents the controller due to installation errors and system failures caused damage.

功能特点 Features

- ◆ 共正极控制方式，多路太阳能电池方阵输入控制（可用于通信领域）
- ◆ 专业DSP控制，充放电各参数点可设定，适应不同场合的需求
- ◆ PWM充电方式，提高了光伏组件的利用率
- ◆ 三阶段充电（恒流、恒压、浮充），有效延长了蓄电池的寿命
- ◆ 保护功能齐全，运行状态、故障指示灯指示
- ◆ 低功耗显示状态，进一步降低了自身损耗
- ◆ 可实现多台机器并联运行
- ◆ 光伏组件、蓄电池防反接
- ◆ 远程监控（选配）
- ◆ 直流输出功能（选配）

◆ Total positive control, multi-square solar cells input control (available for communication in the field)
 ◆ Professional DSP control, charge and discharge points of each parameter can be set to meet the needs of different occasions

- ◆ PWM charging, increase the utilization of photovoltaic modules
- ◆ Three-stage charging (constant current, constant voltage, float), effectively extending the battery life
- ◆ Protection function, operation status, fault LED indicates
- ◆ Low-power display status, further reducing their losses
- ◆ Enables parallel operation of multiple machines
- ◆ PV module, battery anti-reverse
- ◆ Remote monitoring (optional)
- ◆ DC output function (optional)

技术参数 Technical data

| 电压等级 Voltage level | GSP24 | GSP48 | GSP110 | GSP220 | GSP360 |
|--|--|-------|--------|--------|--------|
| 额定电池电压 Rated voltage (VDC) | 24 | 48 | 110 | 220 | 360 |
| 额定充电电流 Maximum charging current (A) | 30-90 | | 50-250 | | |
| 充电方式 charging | 三阶段：恒流、恒压、浮充 Three-stage charging : constant current, constant voltage, float | | | | |
| 最大光伏阵列开路电压 Maximum PV array open-circuit voltage (V) | 50 | 100 | 230 | 450 | 750 |
| 推荐光伏工作电压 Recommended photovoltaic operating voltage (V) | 30 | 60 | 130 | 270 | 420 |
| 光伏充电路数（最大） Input paths (maximum) | 3 | | 5 | | |

| | | | | | |
|---|--|------|-------------------------|-------|-------|
| 浮充电压 Float voltage (V) | 27.0 | 54.0 | 121.5 | 243.0 | 405.0 |
| 均充电压 Bulk voltage (V) | 28.4 | 56.8 | 127.8 | 255.6 | 426.0 |
| 空载电流 No-load current (mA) | <1%(额定电流) (Rated current) | | | | |
| 温度补偿系数(可选) Temperature compensation coefficient (optional) | -3 ~ -7mV/°C (每节电池) (each battery) | | | | |
| 使用环境温度 Ambient Temperature (°C) | - 20 ~ + 50 | | | | |
| 允许相对湿度 Permissible relative humidity | <95% 无冷凝 Non-condensing | | | | |
| 使用海拔高度 Altitude (m) | ≤4000 (1000米以上降容使用) (1000 meters above derating) | | | | |
| 防护等级 Degree of protection | IP20 | | | | |
| 壁挂式尺寸 (W × H × D) mm | 330*155*270 | | 330*155*270/440*440*660 | | |
| 重量 Weight (Kg) | 8 | | 9/32~40 | | |
| 保护功能 protection | 光伏阵列反接保护；蓄电池反接保护；夜间防反充电保护；蓄电池过充保护、过放保护；输出过载保护；输出短路保护。 PV array reverse polarity protection; reverse battery protection; nighttime anti-anti-charge protection; battery overcharge protection, over-discharge protection; output overload protection; Output short circuit protection. | | | | |

以上数据为参考数据，若有变动，恕不另行通知。特殊电压可定制。
 Above information is just for reference, no inform if there is any change. Special voltage can be customized.

