

Overview

The Tracer BP series solar charge controller adopt to the advanced Maximum Power Point Tracking charging methods, it enables the system charging and discharging management to obtain the most radical optimization. Increase the system flexibility, yet lower down the system cost. The controller support a variety of battery, for example sealed, gel, flooded and lithium battery. User can view and modify the working status and parameters. It can be widely used on solar home system, traffic signal, solar street light, solar garden lamp, etc.



Features

- Adopt high quality components of ST,IR and Infineon, make sure product using lifespan
- Wide working environment temperature
- Apply to lead-acid battery and lithium battery
- Lithium battery self-activating and low temperature protection function
- Maximum conversion efficiency of 98%
- Advanced Maximum Power Point Tracking (MPPT) technology, with tracking efficiency no less than 99%
- Ultra-fast tracking speed and guaranteed tracking efficiency
- Accurately recognizing and tracking of multiple power points
- PV power limitation function
- Monitoring and setting parameter via Mobile APP, PC Monitor setting software with RS485 communication interface
- Use of standard Modbus communication protocol for RS485 bus connections, communication protocol compatibility much better
- Connecting the IOT(Internet of Things) module and Cloud Server monitoring software to realize remote monitoring of the multi-machine system
- The RS485 connector can provide power supply
- Aluminum housing for better cooling
- Real-time energy statistics function
- IP67 waterproof degree
- Long lifespan design

Electronic protections

- PV Over Current
- PV Short Circuit
- PV Reverse Polarity
- Battery Reverse Polarity
- Battery Over Voltage
- Battery Over Discharge
- Battery Overheating
- Lithium battery Low Temperature
- Load Overload
- Load Short Circuit
- Temperature sensor break down













Technical Specifications

| Model | | Tracer2606 BP | Tracer3906 BP | Tracer5206 BP | Tracer2610 BP | Tracer3910 BP | Tracer5210 BP | Tracer7810 BP |
|--------------------------------------|-----------------------------------|--|----------------------|----------------------|---|----------------------|----------------------|----------------------|
| Nominal system voltage | | 12/24VDC Auto(Lithium battery do not automatic identification system voltage) | | | | | | |
| Battery input voltage range | | 8.5 ~ 32VDC | | | | | | |
| Rated charge/discharge current | | 10A | 15A | 20A | 10A | 15A | 20A | 30A |
| Rated charge power | | 130W/12V 260W/24V | 195W/12V 390W/24V | 260W/12V 520W/24V | 130W/12V 260W/24V | 195W/12V 390W/24V | 260W/12V 520W/24V | 390W/12V 780W/24V |
| Max. PV open circuit voltage | | 60V(at minimum operating environment temperature) 46V(at 25°C environment temperature) | | | 100V(at minimum operating environment temperature) 92V(at 25°C environment temperature) | | | |
| MPP Voltage range | | (Battery voltage+2V) ~ 36V | | | (Battery voltage+2V) ~ 72V | | | |
| Battery Type | | Lead-acid battery: Sealed(Default) / Gel / Flooded/User; Lithium battery:LiFePO4/ Li-NiCoMn/User | | | | | | |
| Lead-acid | Equalize Charging Voltage | Sealed :14.6V/Gel: No / Flooded:14.8V/User:9-17V (×2/24V) | | | | | | |
| | Boost Charging Voltage | Sealed:14.4V/Gel: 14.2V/Flooded:14.6V/User:9-17V (×2/24V) | | | | | | |
| | Float Charging Voltage | Sealed/Gel/Flooded:13.8V/User:9-17V (×2/24V) | | | | | | |
| | Low Voltage Reconnect Voltage | Sealed/Gel/Flooded:12.6V/User:9-17V (×2/24V) | | | | | | |
| | Low Voltage Disconnect Voltage | Sealed/Gel/Flooded:11.1V/User:9-17V (×2/24V) | | | | | | |
| Lithium | Boost Charging Voltage | LiFePO4:14.5V/ Li-NiCoMn:12.5V / User:9-17V (×2/24V) | | | | | | |
| | Low Voltage Reconnect Voltage | LiFePO4:12.8V / Li-NiCoMn:10.5V / User:9-17V (×2/24V) | | | | | | |
| | Low Voltage Disconnect Voltage | LiFePO4:11.1V / Li-NiCoMn:9.3V / User:9-17V (×2/24V) | | | | | | |
| Self-consumption | | ≤13mA(12V);≤11.5mA(24V) | | | | | | |
| Temperature compensation coefficient | | -3mV/°C/2V(Lithium battery don't have temperature compensation coefficient) | | | | | | |
| Communication | | RS485 | | | | | | |
| Working environment Tem. | | -40°C ~ +60°C -40°C ~ +50°C | | | | | | |
| Enclosure | | IP67 | | | | | | |
| Overall dimension(mm) | | 124×89×30 | 150×93.5×32.7 | 153×105×52.1 | 124×89×30 | 150×93.5×32.7 | 153×105×52.1 | 153.3×105×52.1 |
| Mounting hole size | | Ф3.5mm | | | | | | |
| Mounting dimension(mm) | | 88×76mm | 120×83mm | 120×94mm | 88×76mm | 120×83mm | 120× | 94mm |
| Power cable | | 14AWG(| 2.5mm2) | 12AWG(4mm2) | 14AWG(2.5mm2) | | 12AWG(4mm2) | 10AWG(6mm2) |
| Net weight | | 0.54kg | 0.74kg | 1.20kg | 0.54kg | 0.74kg | 1.20kg | 1.26kg |