

### 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.

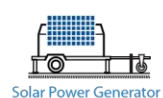


### Features

- 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	φ3.5mm						
Mounting dimension(mm)	88×76mm	120×83mm	120×94mm	88×76mm	120×83mm	120×94mm	
Power cable	14AWG(2.5mm <sup>2</sup> )		12AWG(4mm <sup>2</sup> )	14AWG(2.5mm <sup>2</sup> )		12AWG(4mm <sup>2</sup> )	10AWG(6mm <sup>2</sup> )
Net weight	0.54kg	0.74kg	1.20kg	0.54kg	0.74kg	1.20kg	1.26kg



## Northern Sunshine Co.,Ltd.

82/33 Soi Rattanathibet 26/1 Bangkrasore , Maung Nonthaburi , Nonthaburi 11000

Tel. 02-9657588 , 081-8465426 , 086-3411861 Fax. 02-9657599

E-Mail : sales@nsthai.com

website : www.nsthai.com