

## **Tracer-BPL Series**

## Solar charge controller with built in LED Driver

## **Overview**

Tracer-BPL series MPPT solar charge controller combines solar charge controller and LED constant current driver into one unit. It has multiple load control modes which are ideal for various solar LED Lighting applications, especially when a dimming function is needed. This series adopts the advanced MPPT (Maximum Power Point Tracking) charging methods which will results up to 30% charging efficiency increase compared with the PWM charge controllers. Thanks to the RS485 communication, the Tracer-BPL has the ability to realize remote monitoring via IoT.

## **Features**

- MPPT charging mode
- LED load dimmer function
- · Support lead-acid and lithium-ion batteries
- Lithium battery self-activating function
- Intelligent power derating to ensure 365 days lighting on
- Multiple load control modes
- · Extensive electronic protection
- RS485 communication port to realize IOT monitor
- IP68 Ingress protection(1.5 meters, 72h)



















Model	Tracer2606BPL	Tracer3906BPL	Tracer5206BPL	Tracer2610BPL	Tracer3910BPL	Tracer5210BPI
Nominal system voltage	12/24VDC Auto					
Battery type	Lead-acid (Sealed/Gel/Flooded)/Lithium (LiFePO4/Li(NiCoMn)O2)/User					
Battery input voltage range	9 ~ 32VDC					
Rated charge current	10A	15A	20A	10A	15A	20A
Rated charge power	130W/12V 260W/24V	200W/12V 400W/24V	260W/12V 520W/24V	130W/12V 260W/24V	200W/12V 400W/24V	260W/12V 520W/24V
Max. output current	3.3A	4.5A	6.6A	3.3A	4.5A	6.6A
Max. output power	100W	130W	200W	100W	130W	200W
Max. PV open circuit voltage	60V( at minimum operating environment temperature ) 46V( at 25°C environment temperature ) 92V( at 25°C environment temperature )				onment temperatu ture )	
MPP voltage range	(Battery voltage+2V) ~ 36V			(Battery voltage+2V) ~ 72V		
Output voltage range	( Max. battery voltage+2V) ~ 58V					
Output current control accuracy	≤2%					
Equalization voltage	Sealed:14.6V,Flooded:14.8V,User-defined:9-17V					
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V,User-defined:9-17V					
Float voltage	Gel/Sealed/Flooded:13.8V,User-defined:9-17V					
Low voltage reconnect voltage	Gel/Sealed/Flooded:12.6V,User-defined:9-17V					
Low voltage disconnect voltage	Gel/Sealed/Flooded:11.1V,User-defined:9-17V					
Self-consumption	≤15mA/12V;≤22mA/24V					
Temperature compensation ( for lead-acid battery)	-3mV/°C/2V(default)					
Enclosure	IP68					
Communication interface	RS485(waterproof)					
Operating temperature range	-40°C ~ +60°C					
Dimensions(LxWxH)(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
Net weight	0.54kg	0.73kg	1.18kg	0.54kg	0.73kg	1.18kg
The controlller can't automatically in the control of the con	dentify system voltage i	f lithium batteries were	connected.	<u> </u>	I	I