

### Overview

Tracer-BN series. Based on common negative design and advanced MPPT control algorithm, with die-cast aluminum design for heat dissipation, products in this series are artistic, economical and practical.

With MPPT control algorithm, in any situation, products of this series can fast and accurately track out the best maximum power point (MPP) of photovoltaic array, in order to obtain the maximum solar energy in time, which remarkably improves energy efficiency. With Modbus communication protocol interface, it is convenient for customers to expand applications and monitor in various fields like telecommunication base station, household system, caravan system, street lighting system, wilderness monitoring system, etc.

All-round electronic fault self-test function and enhanced electronic protection function could furthest avoid damages on system components resulting from installation errors or system failures.



### Features

- Advanced Maximum Power Point Tracking (MPPT) technology, with efficiency no less than 99.5%
- High quality components, perfecting system performance, with maximum conversion efficiency of 98%
- Ultra-fast tracking speed and guaranteed tracking efficiency
- Accurately recognizing and tracking of multiple power points
- Reliable automatic limit function of maximum PV input power, ensuring no overload under any circumstance
- Wide MPP operating voltage range
- Die-cast aluminum design, ensuring excellent heat dissipation characteristic
- 12/24VDC automatically identifying system voltage or user-defined working voltage
- LED indicators showing system status, simple and clear
- Multiple load control modes: manual control, light ON/OFF, light On+Timer and time control
- Support 4 charging options: Sealed, Gel, Flooded and User
- Battery temperature compensation function
- Real-time energy statistics function
- With RS-485 communication bus interface and Modbus communication protocol, it is available to meet various communication requirements in different situations
- Available for PC monitoring and external display unit connecting like MT50 and so on, realizing real-time data checking and parameters setting



Solar Car



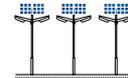
Solar Home



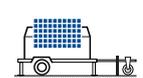
Solar Backpack



Solar Boat



Solar Street Light



Solar Power Generator

## Technical specifications

Model	Tracer2215BN	Tracer3215BN	Tracer4215BN
Nominal system voltage	12/24VDC or Auto		
Battery type	Sealed(Default)/Gel/Flooded/User		
Battery input voltage range	8 ~ 32V		
Rated charge current	20A	30A	40A
Rated discharge current	20A	20A	20A
Rated charge power	260W/12V 520W/24V	390W/12V 780W/24V	520W/12V 1040W/24V
Max. conversion efficiency	≤98.0%		
Tracking efficiency	≥99.5%		
Max. PV open circuit voltage	150V(at minimum operating environment temperature) 138V(at 25°C environment temperature)		
MPP voltage range	Battery voltage+2V ~ 108V		
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	≤60mA(12V); ≤30mA(24V)		
Temperature compensation	-3mV/°C/2V(Default)		
Relative humidity	≤95% (N.C.)		
Enclosure	IP30		
RS485 interface	RS485(RJ45 interface)		
Grounding	Common negative		
Operating temperature range	-35°C ~ +55°C		
Dimensions(LxWxH)	216.6×142.6×56mm	280.7×159.7×60mm	302.5×182.7×63.5mm
Weight	1.5kg	2.2kg	2.9kg