



- Advanced MPPT technology
- High tracking efficiency no less than 99.5%
- Peak conversion efficiency of 98%
- Ultra-fast tracking speed.
- Accurately recognizing and tracking MPP of multiple wave crest.
- Automatic PV power limit function
- Accurately tracking and recognizing MPP among multiple wave crest
- Reliable automatic PV current limiting function
- Wide MPP operating voltage range
- Die-cast aluminium design, ensuring excellent heat dissipation

## MPPT Solar Charge Controller

Tracer- BN Series is a flagship among all the Tracer MPPT (Maximum Power Point Trading) controllers. Designed with industrial materials and die-cast aluminum housing cooling system, to improve the controller's performance and lifespan. To meet different projects and applications, the unit boasts a built-in RS485 bus interface, with Modbus communication protocol, easy for communication extension with other devices. Optional programmable ability makes the controllers work with different batteries. Control your DC load remotely; on/off manually, via timer, light etc. A current limiting function gives you more flexibility for a solar PV array.

## TECHNICAL INFORMATION

### Specifications:

Nominal system voltage	12/24VDC autowork
Rated charge current	30A
Rated discharge current	20A
Max. PV open circuit voltage	150V (at minimum operating environment temperature) 138V at 25° environment temperature
MPP voltage range	Vbat+2V~108V
Max. PV input power	(12V) 390W (24V) 780W
Equalize charging voltage*	Sealed: 14.6V, Flooded:14.8V, User: 9~17V
Boost charging voltage*	Gel: 14.2V, Sealed: 14.4V, Flooded: 14.6V, User: 9~17V
Float charging voltage*	Gel /Sealed /Flooded: 13.8V, User: 9~17V
Low voltage reconnect voltage*	Gel /Sealed /Flooded: 12.6V, User: 9~17V
Low voltage disconnect voltage*	Gel /Sealed /Flooded: 11.1V, User: 9~17V
Self-consumption	≤60mA (12V); ≤30mA(24V)
Temperature compensation	-3mV/ °C/2V
Communication	RS485 (RJ45 interface)
Grounding	Common negative
Enclosure	IP30
Working temperature	-35 °C ~ +55 °C
Humidity range	≤95% (N.C.)

## PACKAGE CONTENTS



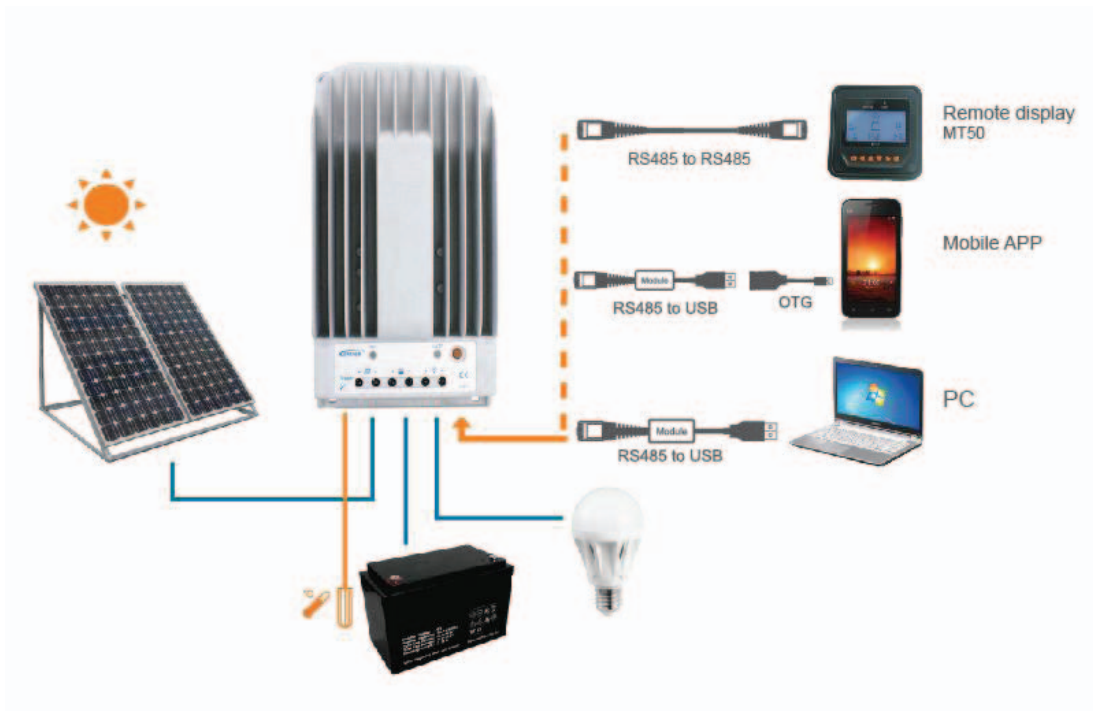
1 x MPPT Solar Charge Controller

## PACKAGE DIMENSIONS



	Height (mm)	Depth (mm)	Width (mm)	Weight (kg)
Product	281	160	60	2.3

## Basic Diagram



## Operation

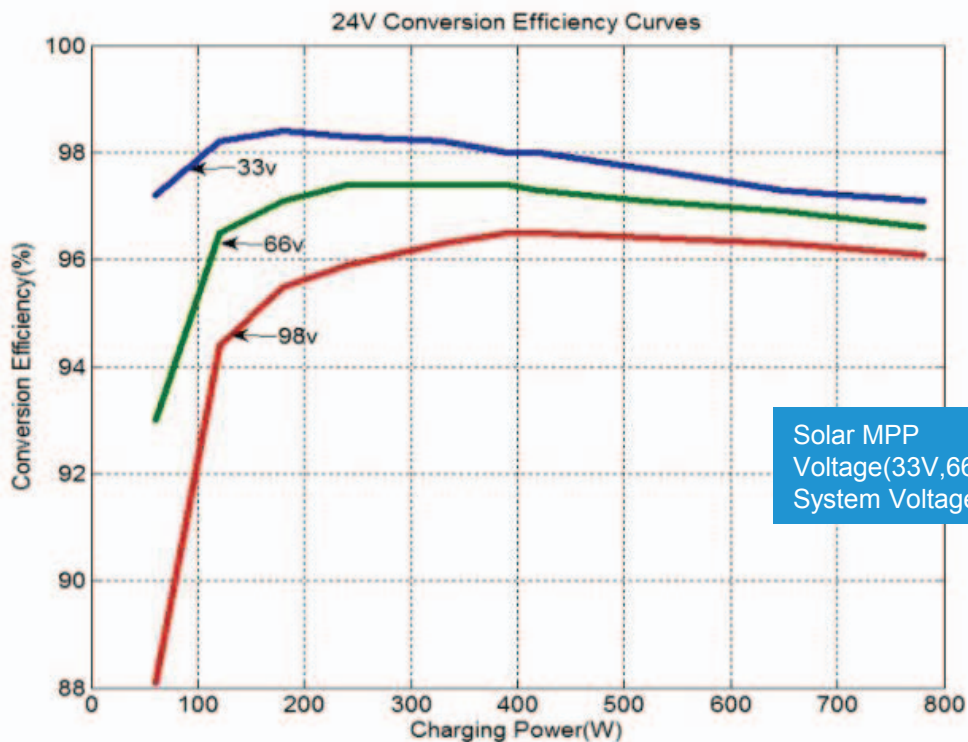
Several methods for real time monitoring and parameter setting

1. Remote meter, MT50
2. PC monitoring setting software "Solar Station Monitor"
3. Mobile APP (Android system)

## Conversion Efficiency Curves:

Illumination Intensity: 1000W/m<sup>2</sup> Temperature: 25°C

Test model: Tracer3215BN



Solar MPP  
Voltage(33V,66V,98V)  
System Voltage(24V)