

Tracer-BN Series MPPT solar charge controller

Overview

Tracer-BN series adopts common negative design, advanced MPPT control algorithm, and die-cast aluminum heat dissipation design. Modbus communication protocol interface is convenient for extending applications such as telecommunication base station, household system, RV system, street lighting system, field monitoring system, etc.

Features

- MPPT tracking efficiency above 99.5%
- Maximum charge conversion efficiency as high as 98%
- Multiple load work modes
- Real-time energy statistics function
- Battery type selection: Sealed, Gel, Flooded and User(programmable)
- Extensive electronic protection
- Standard Modbus communication protocol with RS485 interface
- Die-cast aluminum case design



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		
Communication interface	RS485(RJ45)		
Grounding	Common negative		
Operating temperature range	-35°C ~ +55°C		
Dimensions(LxWxH)mm	216.6×142.6×56	280.7×159.7×60	302.5×182.7×63.5
Net weight	1.5kg	2.2kg	2.9kg
The voltage point is for 12V system, please *2 in 24V system.			