

Overview

Tracer-AN(50A-100A) series is the largest charge controller series in EPEVER's product range and can take up to 5KW solar panel. For even more power, the user can use PAL-ADP-50N to connect max. 6 units of a control-ler in parallel for up to 30KW system. The multiple dry contact signals are designed for a diversified application.

Features

- MPPT tracking efficiency above 99.5%
- Maximum charge conversion efficiency as high as 98%
- Support lead-acid and lithium-ion batteries
- Common negative grounding, Charging current up to 100A
- Charging power and current limitation function
- High-temperature charging power derating function
- 3 relays design for different demand: utility, generator and load
- Support up to 6 units in parallel
- Remote temperature and voltage sensor design
- Isolated RS-485 with 5VDC/200mA and MODBUS protocol



Solar Car



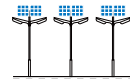
Solar Home



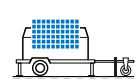
Solar Backpack



Solar Boat



Solar Street Light



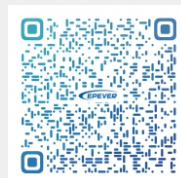
Solar Power Generator

Technical Specifications

Model	Tracer 6210AN	Tracer 5415AN	Tracer 6415AN	Tracer 8415AN	Tracer 10415AN	Tracer 5420AN	Tracer 6420AN	Tracer 8420AN	Tracer 10420AN
Nominal system voltage	12/24VDC/Auto	12/24/36/48VDC/Auto							
Battery type	Lead-acid(Sealed/Gel/Flooded)/Lithium(LiFePO ₄ /Li(NiCoMn)O ₂)/User								
Battery input voltage range	8V ~ 32V	8V ~ 68V	8V ~ 68V	8V ~ 68V	8V ~ 68V	8V ~ 68V	8V ~ 68V	8V ~ 68V	8V ~ 68V
Rated charge current	60A	50A	60A	80A	100A	50A	60A	80A	100A
Rated charge power	750W/12V 1500W/24V	625W/12V 1250W/24V 1875W/36V 2500W/48V	750W/12V 1500W/24V 2250W/36V 3000W/48V	1000W/12V 2000W/24V 3000W/36V 4000W/48V	1250W/12V 2500W/24V 3750W/36V 5000W/48V	625W/12V 1250W/24V 1875W/36V 2500W/48V	750W/12V 1500W/24V 2250W/36V 3000W/48V	1000W/12V 2000W/24V 3000W/36V 4000W/48V	1250W/12V 2500W/24V 3750W/36V 5000W/48V
Max. conversion efficiency	98.00%	98.30%	98.60%	98.50%	98.60%	98.30%	98.10%	98.50%	98.50%
Tracking efficiency	≥99.5%								
Max. PV open circuit voltage	100V(At minimum operating environment temperature) 92V(At 25°C environment temperature)	150V (At minimum operating environment temperature) 138V (At 25°C environment temperature)				200V (At minimum operating environment temperature) 180V(At 25°C environment temperature)			
MPP voltage range	(Battery Voltage+2V) ~ 72V	(Battery Voltage+2V) ~ 108V				(Battery Voltage+2V) ~ 144V			
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	98mA/12V;60mA/24V;50mA/36V;46mA/48V								
Temperature compensation (for lead-acid battery)	-3mV/°C/2V(Default)								
Relative humidity	5% to 95% (N.C.)								
Enclosure	IP20								
Communication interface	RS485(5VDC/200mA,Two RJ45 ports in parallel)								
Grounding	Common negative								
Operating temperature range	-25°C ~ +60°C(derating above 45°C)								
Dimensions (LxWxH)(mm)	340×232×105.2	261×216×119	340×236×119	394×240×134	394×242×143	261×216×119	340×236×119	394×240×134	394×242×143
Net weight	3.5kg	3.5kg	4.5kg	6.1kg	7.4kg	3.5kg	4.5kg	6.1kg	7.4kg

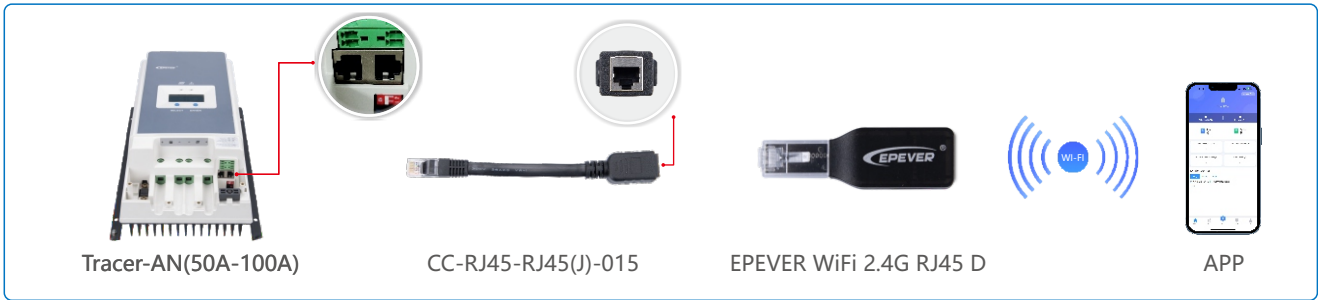
1. The controller can't automatically identify system voltage if lithium batteries were connected.

2. The voltage point is for 12V system, please *2 in 24V system, *3 in 36V system, *4 in 48V system.



WIFI Module Connection Diagram

Tracer-AN (50-100A) can be connected to the WIFI module via a standard Ethernet cable (parallel line). The APP software can set the controller's relevant parameters through WIFI signals. For specific setup instructions, please refer to the user manual provided with the APP.



Communication Cable Options:

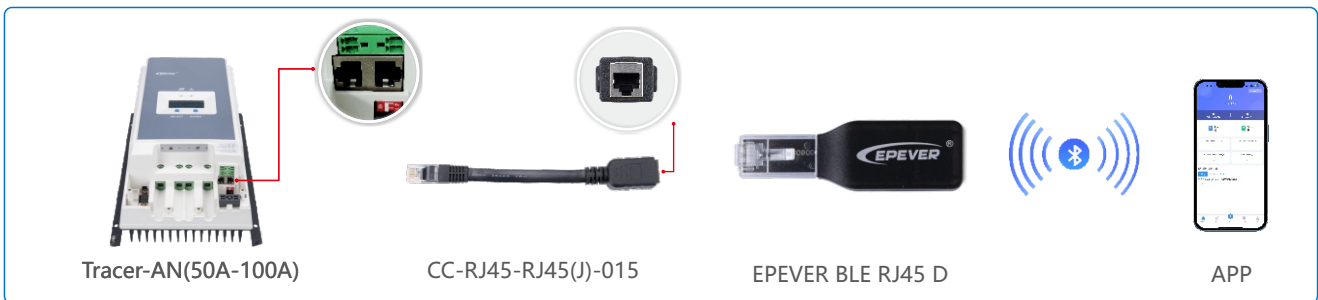


Name: RS485 to WiFi Communication Cable
 Specification: CC-RJ45-RJ45(J)-015
 Description: RJ45 plug to RJ45 jack, 0.15 meters long

Name: RS485 to WiFi Communication Cable
 Specification: CC-RJ45-RJ45(J)-150
 Description: RJ45 plug to RJ45 jack, 1.5 meters long

Bluetooth Module Connection Diagram

Tracer-AN (50-100A) can be connected to the Bluetooth module via a standard Ethernet cable (parallel line). The mobile APP software can set the controller's relevant parameters through Bluetooth signals. For specific setup instructions, please refer to the user manual provided with the cloud APP.



APP Monitoring



Apple App Store



Google Play Store