

Tracer-AN(50A-100A) Series

MPPT solar charge controller

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 controller 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























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 (LiFePO4/Li(NiCoMn)O2)/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/12\ 2500W/24\ 3750W/36\ 5000W/48\
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)	ure) 150V (At minimum operating environment temperature) 200V (At minimum operating environment tempera						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	394×242×14
Net weight	3.5kg	3.5kg	4.5kg	6.1kg	7.4kg	3.5kg	4.5kg	6.1kg	7.4kg
The controlller can't automa	tically identify system voltage if li	thium batteries	were connecto	ed.			I	1	I

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

