

SOLAR CHARGER CONTROLLER



MPPT Tracer-BN Series

10A - 40A

Tracer BN series is EPSolar's second generation of MPPT controller. Compared with CLASSIC Tracer series, it has extensive communication ability. And the die-cast aluminium design ensures excellent heat dispersion.

Compared to conventional PWM controller, MPPT technology increases the charge efficiency up to 30% and potentially decrease the power of solar array needed.

Features:

- Advanced MPPT technology, with efficiency no less than 99.5%
- Maximum conversion efficiency of 98%
- Ultra-fast tracking speed and guaranteed tracking efficiency
- Accurately recognizing and tracking of multiple power points
- Available for PC monitoring and external display unit connecting like MT50 and so on, realizing real-time data checking and parameters setting.
- Die-cast aluminum design, ensuring excellent heat dissipation characteristic
- Support software upgrade.

Electronic protections:

- PV short circuit protection
- PV reverse polarity protection
- Battery over discharge protection
- Load overload protection
- Battery overheating protection
- PV over current protection
- Battery over voltage
- Battery reserve polarity protection
- Load short circuit protection
- Controller overheating protection

Technical specifications :

MODEL	TRACER1215BN	TRACER2215BN	TRACER3215BN	TRACER4215BN
Nominal system voltage	12 / 24V auto work			
Rated battery current	10A	20A	30A	40A
Rated load current	10A	20A	20A	20A
Max. PV open circuit voltage	150V at minimum operating environment temperature 138V at 25°C environment temperature			
MPP Voltage range	Battery voltage + 2V~108V			
Max. PV input power	130W (12V)	260W (12V)	390W (12V)	520W (12V)
	260W (24V)	520W (24V)	780W (24V)	1040W (24V)
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)			
Grounding	Common negative			
Temp. compensation	-3mV / °C / 2V			
Communication port	RS485 / RJ45 interface			

* Technical data for 12V system at 25°C

MECHANICAL	TRACER1215BN	TRACER2215BN	TRACER3215BN	TRACER4215BN
Overall dimension	196x118x36 mm	217x143x56 mm	281x160x60 mm	303x183x64 mm
Terminal	4 mm ²	10 mm ²	16 mm ²	25 mm ²
Net weight	0.9 kg	1.5 kg	2.3 kg	2.9 kg
Enclosure	IP30			

ENVIRONMENTAL

Working temperature	-35°C~+55°C
Storage temperature	-35°C~+80°C
Humidity	≤95% N.C.