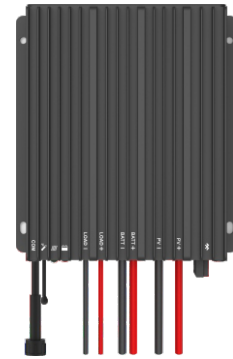


Overview

The Tracer-CPN solar charge controller adopts the advanced Maximum Power Point Tracking charging technology. Increase the system charging efficiency yet lower the system cost. The controller supports various batteries, such as sealed, gel, flooded, and lithium batteries. Users can view and modify the operational status and parameters. It can be widely used in a solar home system, traffic signal, street light, solar garden lamp, etc.



Features

- MPPT (maximum power point tracking) charging
- Support lead-acid and lithium-ion batteries
- Lithium battery self-activating function
- Constant voltage output function
- Multi load control mode
- Extensive electronic protections
- Built-in Bluetooth module (Only Tracer-CPN(BLE) supports)
- Low self-consumption design, lower than 15mA
- RS 485 communication, support IoT monitoring
- IP68 Ingress protection(1.5 meters, 72h)

Technical Specifications

Item	Model	Tracer5206CPN/Tracer5206CPN(BLE)	Tracer7810CPN/Tracer7810CPN(BLE)
Battery Rated Voltage		12/24VDC Auto(Lithium battery cannot automatically identify system voltage)	
Battery Work Voltage Range		8 ~ 32VDC	
Rated Charge/Discharge Current		20A	30A
Rated Charge Power		260W/12V; 520W/24V	390W/12V; 780W/24V
PV Maximum Open-circuit Voltage		60V (at minimum operating environment temperature) 46V(at 25°C environment temperature)	100V (at minimum operating environment temperature) 92V(at 25°C environment temperature)
MPPT Voltage Range		(Battery voltage +2V) ~ 36V	(Battery voltage +2V) ~ 72V
Battery Type		Lead-acid battery: Sealed(Default) / Gel / Flooded/User; Lithium battery:LiFePO4/ Li-NiCoMn/User	
Lead-acid	Equalize Charging Voltage	Sealed: 14.6V, Gel: No, Flooded: 14.8V, User: 9-17V (×2/24V)	
	Boost Charging Voltage	Sealed: 14.4V, Gel: 14.2V, Flooded: 14.6V, User: 9-17V (×2/24V)	
	Float Charging Voltage	Sealed/Gel/Flooded: 13.8V, User: 9-17V (×2/24V)	
	Low Voltage Reconnect Voltage	Sealed/Gel/Flooded: 12.6V, User: 9-17V (×2/24V)	
	Low Voltage Disconnect Voltage	Sealed/Gel/Flooded: 11.1V, User: 9-17V (×2/24V)	
Lithium	Boost Charging Voltage	LiFePO4: 14.5V, Li-NiCoMn: 12.5V, User: 9-17V (×2/24V)	
	Low Voltage Reconnect Voltage	LiFePO4: 12.8V, Li-NiCoMn: 10.5V, User: 9-17V (×2/24V)	
	Low Voltage Disconnect Voltage	LiFePO4: 11.1V, Li-NiCoMn: 9.3V, User: 9-17V (×2/24V)	
Static Losses		≤10mA(12V); ≤7mA(24V)	≤15mA(12V); ≤9mA(24V)
Temperature Compensation		-3mV/°C/2V (Lithium batteries don't have temperature compensation coefficient)	
Communication Method		RS485/BLE	
Work Temperature Range		-40°C ~ +50°C (Above 45°C, please operate in derating)	
Enclosure		IP68	
Dimension (L x W x H)		Tracer5206CPN: 150.6mm × 130mm × 50mm Tracer5206CPN(BLE): 159mm × 130mm × 50mm	Tracer7810CPN: 158.6mm × 141mm × 51.5mm Tracer7810CPN(BLE): 167mm × 141mm × 51.5mm
Mounting Hole Size		Φ4.5mm	Φ4.5mm
Mounting Size (L x W)		121mm × 120mm	132mm × 120mm
Power Cable (PV/BAT/LOAD)		PV:11AWG, BAT/LOAD: 10AWG	PV:11AWG, BAT/LOAD: 10AWG
Net Weight		1.25kg	2.60kg

Technical Specifications

The Tracer-CPN can connect to the TCP 306 / RTU 4G via the CC-4M12(M)-RJ45(J)-020 / CC-USB-4M12(M)-150 adapter. Manage controller parameter settings via mobile app software on the cloud platform. Refer to the platform for specific parameters and setup instructions.

