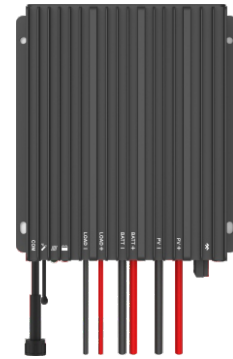


Overview

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

Model		Tracer7810CPN/Tracer7810CPN(BLE)
Rated system voltage	12/24VDC Auto(Lithium battery cannot automatically identify system voltage)	
Battery work voltage range	8 ~ 32VDC	
Rated charge/discharge current	30A	
Rated charge power	390W/12V; 780W/24V	
Max. PV open circuit voltage	100V (at minimum operating environment temperature) 92V(at 25°C environment temperature)	
MPP Voltage range	(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)
Self-consumption	≤15mA(12V); ≤9mA(24V)	
Temperature compensation coefficient	-3mV/°C/2V (Lithium batteries don't have temperature compensation coefficient)	
Communication	RS485/BLE	
Work temperature (Above 45°C, please operate in derating)	-40°C ~ +50°C (Above 45°C, please operate in derating)	
Enclosure	IP68	
Dimension (L x W x H)	Tracer7810CPN: 155mm × 141mm × 51.5mm Tracer7810CPN(BLE): 165mm × 141mm × 51.5mm	
Mounting hole size	Φ4.5mm	
Mounting size (L x W)	132mm × 120mm	
Power cable (PV/BAT/LOAD)	PV:11AWG, BAT/LOAD: 10AWG	
Net weight	1.59kg	