

Overview

Tracer-LPLI series MPPT solar charge controller combines solar charge controller and LED constant current driver into one unit. It has multiple load control modes which are ideal for various solar LED Lighting applications, especially when a dimming function is needed. This series adopts the advanced MPPT (Maximum Power Point Tracking) charging methods which will result up to 30% charging efficiency increase compared with the PWM charge controllers.

Features

- MPPT charging mode
- Support lead-acid and lithium-ion batteries
- Lithium battery self-activating function
- Advanced intelligent power derating function
- Multiple load control modes
- Automatic load test feature during installation
- Extensive electronic protection
- Infrared wireless communication design
- IP68 Ingress protection(1.5 meters, 72h)



Solar Car



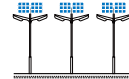
Solar Home



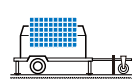
Solar Backpack



Solar Boat



Solar Street Light



Solar Power Generator

Technical Specifications

Item	Tracer1305LPLI	Tracer2606LPLI	Tracer3906LPLI	Tracer5206LPLI	Tracer2610LPLI	Tracer3910LPLI	Tracer5210LPLI
Nominal system voltage	12VDC	12/24VDC					
Battery input voltage range	8.5 - 16VDC	8.5 - 32VDC					
Rated charge current	10A/12V	10A	15A	20A	10A	15A	20A
Rated charge power	130W/12V	130W/12V; 260W/24V	200W/12V; 400W/24V	260W/12V; 520W/24V	130W/12V; 260W/24V	200W/12V; 400W/24V	260W/12V; 520W/24V
Max. PV open circuit voltage	50V (Min. Temp.) 45V(25°C)	60V(at minimum operating environment temperature) 46V(at 25°C environment temperature)			100V(at minimum operating environment temperature) 92V(at 25°C environment temperature)		
MPP Voltage range	(Battery voltage+2V) - 36V				(Battery voltage+2V) - 72V		
Max. output current	3.3A	3.3A	4.5A	6.6A	3.3A	4.5A	6.6A
Max. output power	100W	100W	130W	200W	100W	130W	200W
Output voltage range	(Max. battery voltage+2V) - 46V	(Max. battery voltage+2V) ~ 58V			(Max. battery voltage+2V) ~ 80V		
Load open circuit voltage	46V	58V			80V		
Load over-voltage protection	50V	63V			100V		
Maximum output efficiency	96%						
Output current control accuracy	≤2%						
Battery Type	Lead-acid battery: Sealed(default)/Gel/Flooded/User; Lithium battery:LiFePO4/Li-NiCoMn/User						
Lead-acid	Equalize Charging Voltage	Sealed:14.6V; Flooded:14.8V; User:9-17V (24Vsystem×2)					
	Boost Charging Voltage	Sealed:14.4V; Gel:14.2V; Flooded:14.6V; User:9-17V(24Vsystem×2)					
	Float Charging Voltage	Sealed/Gel/Flooded:13.8V; User:9-17V(24Vsystem×2)					
	Low Voltage Reconnect Voltage	Sealed/Gel/Flooded:12.6V; User:9-17V(24Vsystem×2)					
	Low Voltage Disconnect Voltage	Sealed/Gel/Flooded:11.1V; User:9-17V(24Vsystem×2)					
Lithium	Boost Charging Voltage	LiFePO4(4s):14.5V; Li-NiCoMn(3s):12.5V; User:9-17V(24Vsystem×2)					
	Low Voltage Reconnect Voltage	LiFePO4(4s):12.8V; Li-NiCoMn(3s):10.5V; User:9-17V(24Vsystem×2)					
	Low Voltage Disconnect Voltage	LiFePO4(4s):11.1V; Li-NiCoMn(3s):9.3V; User:9-17V(24Vsystem×2)					
Self-consumption	≤15mA/12V; ≤22mA/24V						
Communication	IR communication						
Work temperature range	-40°C - +60°C						
Enclosure	IP68(1.5m,72h)						
Dimension (L x W x H)	124×89×30mm	150×93.5×32.7mm	153×105×52.1mm	124×89×30mm	150×93.5×32.7mm	153×105×52.1mm	
Mounting hole size	Φ3.5mm						
Mounting size (L x W)	88×76mm	120×83mm	120×94mm	88×76mm	120×83mm	120×94mm	
Power cable	PV/BAT:14AWG(2.5mm ²) LOAD:18AWG(1.0mm ²)			PV/BAT:12AWG(4mm ²) LOAD:16AWG(1.5mm ²)	PV/BAT:14AWG(2.5mm ²) LOAD:18AWG(1.0mm ²)		PV/BAT:12AWG(4mm ²) LOAD:16AWG(1.5mm ²)
Net weight	0.52kg	0.52kg	0.71kg	1.18kg	0.52kg	0.71kg	1.18kg