LDSOLAR

Tracer Dream 100V TU series
MPPT solar charge controller

Overview

Tracer Dream 100V TU Series adopts MPPT technology. Max.100V solar input,12V/24V auto work.It's also ran by 32 bits CPU,so stability and speed can be guaranteed. Based on the synchronous rectifier technology,the transfer efficiency of circuit can be increased up to 98.5% and the Pmax tracking accuracy up to 99. 5%.So our MPPT can trace the accurate Pmax in the shortest time (10~20s) ,even when the sunlight changes rapidly. It can perfectly handle extreme weather or weak sunlight.It adopted by common negative design and it can start from solar,Widely used in RV, ship and so on.

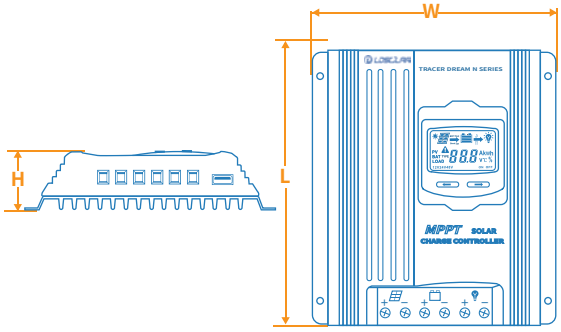
Features

- Advanced MPPT technology, fast and stable track the Maximum Power Point, tracking accuracy 99.5%
- Adopt Synchronous Rectifier Technology, significantly improve the transfer efficiency of circuit, maximum 98.5%.
- accurate identification and tracking multi peak power point function
- PV array limited power input function, to ensure that the controller does not overload operation under any conditions.
- Widely range of Maximum Power Point of PV array, Max PV input Voltage 100V
- 12/24VDC system voltage automatic recognition
- Humanized LCD displaying, dynamic display operation data and working state
- Built-in operation log, account system working state
- Multi load control mode: Normal Mode, Sensor Mode, Timer and Sensor Mode
- 3 stages charging mode, Sealed, Gel, Flooded 3 types battery charging procedure selection
- Temperature Compensation Function
- Accumulation function of charging and discharging, actual time display power generation function
- Fullest digital protection functions: Reverse connection, Overcharging,Over-discharging, Over voltage, Overload, Short circuit.
- 16mm^2 connectors, red and black connector distinguish plus and minus

Mechanical size

Model	TD2210TU	TD2310TU	TD2410TU
Charge and load current	20A	30A	40A
Size (L×W×H)mm	200×127×54	195×183×54	232.5×200.1 ×54
Mounting hole size	Φ5mm		
Weight(kg)	0.87	1.2	1.7
Terminal scale	10mm^2/8AWG	16mm^2/6AWG	25mm^2/4AWG

Please refer to the indicator diagram on the right

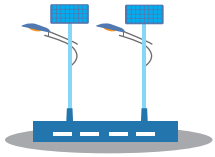


Dimension reference drawing

Application scenario

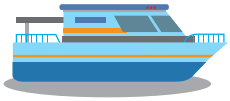
Solar RV

Household solar energy



Solar street lamp

Solar Power Generator



Solar boat

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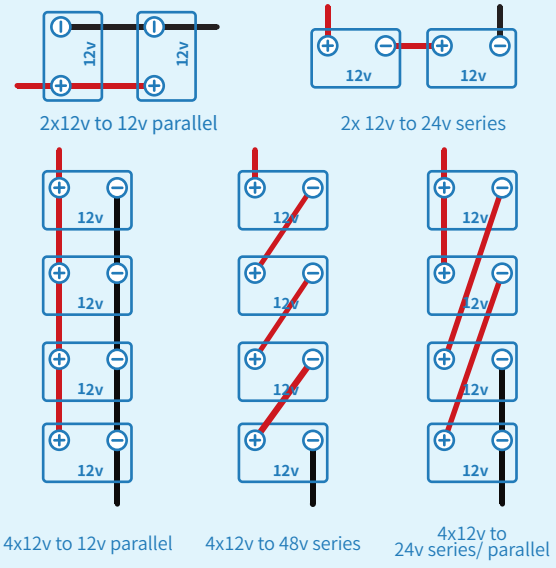
Safety Protection

- Over Charging Protection
- Over Discharging Protection
- Overload Protection
- Short Circuit Protection
- Solar Reverse Connected Protection
- EMC Protection
- Battery Reverse Connected Protection
- Power Limited Protection
- Battery Over-Voltage Protection
- Temperature Compensation
- Over Temperature Protection
- Thunder Protection
- Reverse Flow of Current Protection
- Solar Short Circuit Protection
- Overheating Power Reduction Protection
- Solar Over-Voltage Protection

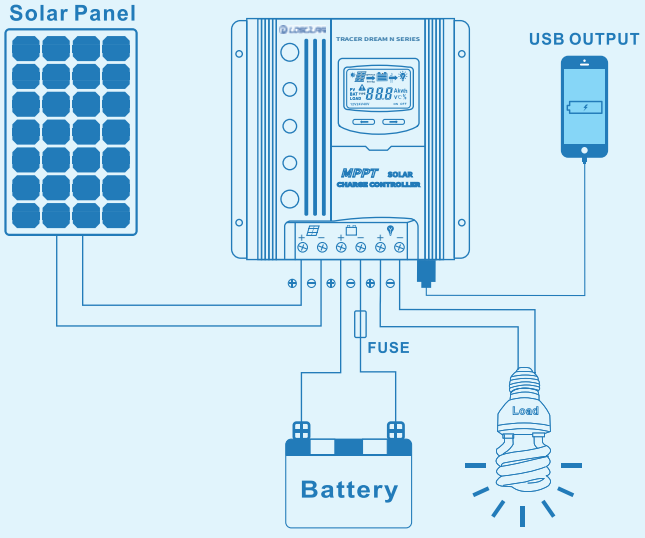
Technical specifications

Model	TD2210TU	TD2310TU	TD2410TU
System Voltage	12V/24V DC auto		
Working voltage range	8~32V		
Max.PV open circuit voltage	100V (Min.working temperature) 95V (25°C)		
MPP voltage range	(Battery voltage+1V) ~75V		
Discharge circuit voltage drop	⩽0.25V		
Self-consumption	<23mA		
Rated charge current	20A	30A	40A
Rated discharge current	20A	30A	40A
Max.PV input power	260W/12V 520W/24V	390W/12V 780W/24V	520W/12V 1040W/24V
Grounding	Common negative		
Battery type	Sealed(Default)/Gel/Flood/Lithium		
LVD※*	11.0V ADJ 9V...12V ; x2/24V ; x4/48V		
LVR※*	12.6V ADJ 11V...13.5V ;x2/24V ; x4/48V		
Float Voltage※*	13.8V ADJ 13V... 15V ; x2/24V ; M/48V		
Boost Voltage※*	14.4V ADJ 13V...17V ;x2/24 ; x4/48V battery voltage less than 12.6v auto boost 2hours		
Battery Over Voltage Protection	16.5V ; x2/24V ; x4/48V		
USB Output	5VDC/1A 1PCS		/
Temperature Consumption#	For 12Vsystem:-24mV /°C ;x2/24V ; x4/48V		
RS485 interface	Optional		
Relative humidity	⩽95%, N.C.		
WorkingTemperature	—20°C~+50°C°C(Product can work continuously at full load)		
LCD temperature range	—20°C~+70°C		
Waterproof grade	IP32		

Connection



Example Wiring Methods



Connection diagram

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