

# MPPT Solar Charge Controller

## Tracer A series



Tracer A series adopts common positive design and advanced MPPT control algorithm. The products can track the MPP point fast and accurately in any situation which will improve energy efficiency and obtain the maximum solar energy.



### Model

- Tracer4210A 40A, 12/24V auto work

### Features :

- Advanced MPPT technology
- High tracking efficiency no less than 99.5%
- Peak conversion efficiency of 98%
- Ultra-fast tracking speed
- Accurately recognizing and tracking of multiple power point
- Multi-function LCD displays system information intuitively
- User programmable for battery types, load control etc.
- 3-Stage charge with PWM output
- Common positive grounding design
- RS485 port with industrial standard MODBUS open architecture
- Fully programmable function via PC software or remote meter

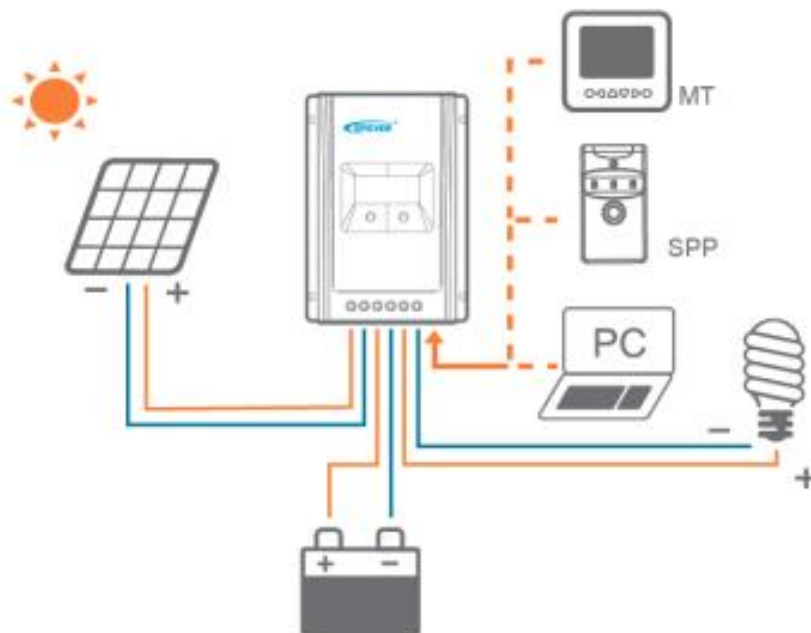


### Electronic protections:

- PV reverse polarity protection
- PV over current alarm protection
- Battery over discharge protection
- Load short circuit protection
- Overheating protection
- PV short circuit protection
- Battery overcharge protection
- Battery reverse polarity protection
- Load overload protection

### Load Set:

- Manual Control (ON/OFF)
- Light ON/OFF (Default)
- Light ON + Timer
- Time Control



### Setting Operation:

There are two methods that can modify load mode and control parameter through infrared interface:

1. Remote meter, MT50
2. Super Parameter Programmer, SPP-02  
This method can realize one-key setting operation which is suitable for bulk quantity products setting or applied in the projects.
3. PC monitoring setting software "Solar Station Monitor"



accessories :



PC software:



## Technical Specifications:

Model	MPPT40A		
Nominal system voltage	12/24VDC auto work		
Rated charge current			40A
Rated discharge current			40A
Battery input voltage range	8~32V		
Max. PV open circuit voltage	100V(at minimum operating environment temperature) 92V(at 25 °C environment temperature)		
MPP voltage range	$V_{BAT}+2V \sim 72V$		
Max. PV input power			520W(12V) 1040W(24V)
Equalize charging voltage	Sealed: 14.6V, Flooded: 14.8V		
Boost charging voltage	Gel: 14.2V, Sealed: 14.6V, Flooded: 14.8V		
Float charging voltage	13.8V		
Low voltage reconnect voltage	12.6V		
Low voltage disconnect voltage	11.1V		
Self-consumption	$\leq 20mA/12V; \leq 16mA/24V$		
Temperature compensation coefficient	$-3mV/^\circ C/2V(25^\circ C)$		
Working temperature	$-25^\circ C \sim +45^\circ C$		
Enclosure	IP30		
Overall dimension			
Power terminals			6AWG(16mm <sup>2</sup> )
Net weight			1.9kg