



# 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.



### Models :

- Tracer1210A 10A, 12/24V auto work
- Tracer2210A 20A, 12/24V auto work
- Tracer3210A 30A, 12/24V auto work
- Tracer4210A 40A, 12/24V auto work

### Features :

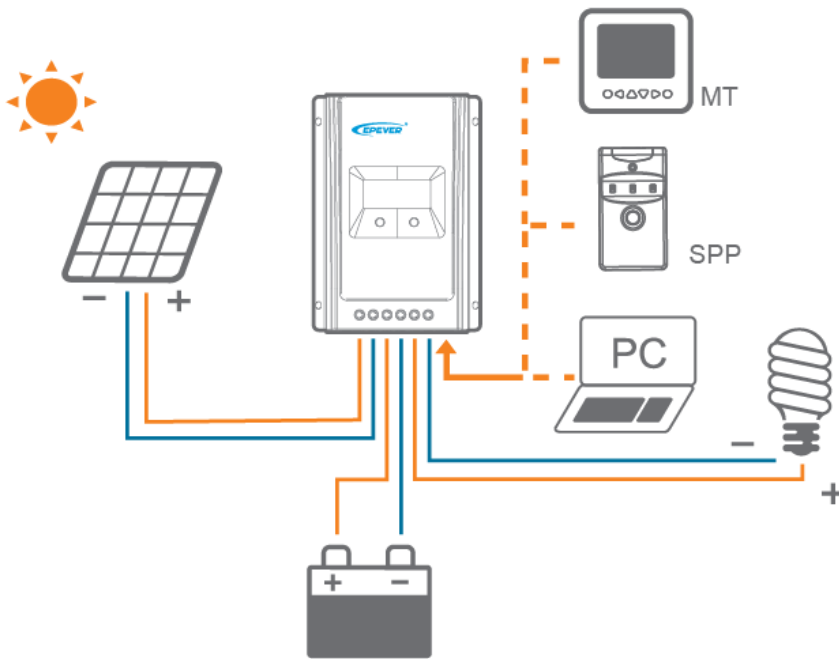
- Advanced MPPT technology
- High tracking efficiency no less than 99.5%
- Peak conversion efficiency of 98%
- Ultra-fast tracking speed
- Accurately recognizing and tracking of multiple power point
- Multi-function LCD displays system information intuitively
- User programmable for battery types, load 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 + Timer
- Light ON/OFF (Default)
- Time Control







### Setting Operation:

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

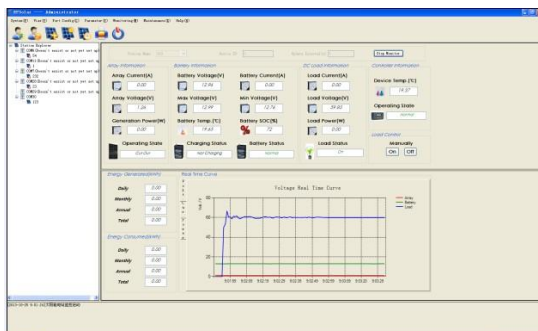
1. Remote meter, MT50
2. Super Parameter Programmer, SPP-02  
This method can realize one-key setting operation which is suitable for bulk quantity products setting or applied in the projects.
3. PC monitoring setting software “Solar Station Monitor”



### Optional accessories :

			
Remote meter MT50	Remote temperature sensor RTS300R47K3.81A	PC communication cable CC-USB-RS485-150U	Super parameter programmer SPP-02

### PC software:



## Technical Specifications:

Model	Tracer1210A	Tracer2210A	Tracer3210A	Tracer4210A
Nominal system voltage	12/24VDC auto work			
Rated charge current	10A	20A	30A	40A
Rated discharge current	10A	20A	30A	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	130W(12V) 260W(24V)	260W(12V) 520W(24V)	390W(12V) 780W(24V)	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	172x139x44mm	220x154x52mm	228x164x55mm	252x180x63mm
Power terminals	12AWG(4mm <sup>2</sup> )	6AWG(16mm <sup>2</sup> )	6AWG(16mm <sup>2</sup> )	6AWG(16mm <sup>2</sup> )
Net weight	0.6kg	1.1kg	1.2kg	1.9kg