

T10/20/30/40

Instruction

Mppt with pwm charging solar controller 40a with light and timer control for solar home systemT40



Overview

This is a three-time controller into the evening (evening) working time, an interval of rest or pause time, Dawn working time (morning light function), the user can according to their needs, set a different time.

This is a compatible MPPT charge controller PWM intelligent / efficient / energy saving, he not only has efficient MPPT controller charging function to automatically track the maximum power point, 10% -30% higher than the ordinary controller charging efficiency,

also has standby energy saving, more than 30% energy than ordinary controller, the standby power consumption of only 10mA-15mA.

Product Description

LCD screen display	Battery reverse discharge protection
Simple (and more time control) operation	Battery reverse polarity protection
MPPT+ PWM charging mode	Battery under voltage protection
Parameter user can reset	Overload, short-circuit protection
A key to open and close the load	Automatic temperature compensation function
A key to restore the factory settings	USB5V charge (current 500mA) Optional

 **PRODUCTS DISPLAY** 



- Automatic temperature compensation function
- Battery reverse discharge protection
- MPPT+ PWM charging mode
- LCD screen display
- Easy operation interface
- Battery under voltage protection
- A key to open and close the load
- USB 5V charging (for 500mA) for mobile phone(Only for T40)



Connection Order

1. Connect the battery with the controller.
2. Connect the solar panel with the controller.
3. Connect the load with the controller or inverter.

Disconnection Order

1. Disconnect the solar panel.
2. Disconnect the battery.
3. Disconnect the load.

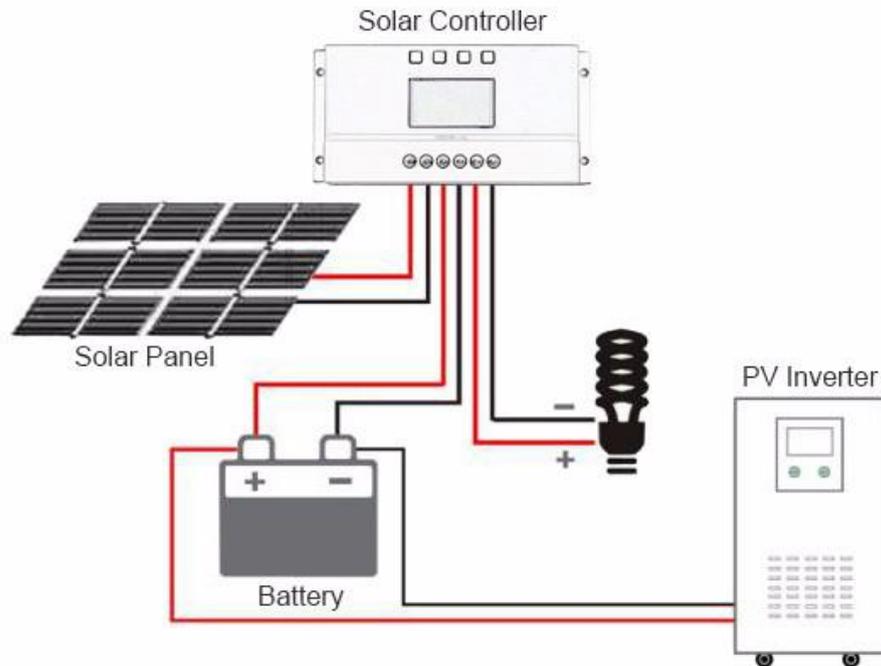
Precautions

1. please make sure connect your inverter with your battery
2. Please avoid to install in the following environments wet, dusty places or places with flammable and explosive gases.
3. Install the controller at the vertical plane.

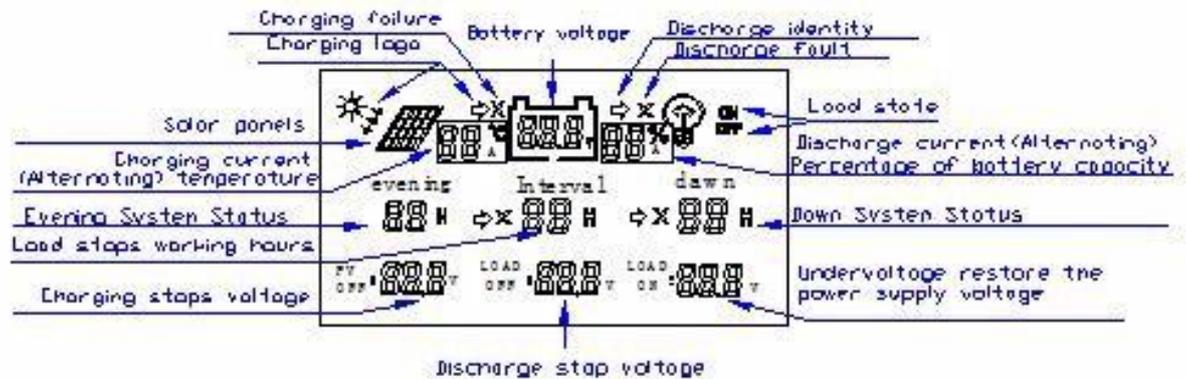


- Short-circuit protection
- Battery reverse polarity protection
- A key to restore the factory settings
- Parameter user can reset Overload

Connection Diagram & Precautions



LCD Display



Evening H	<p>Load output state is set:</p> <p>Set to 00H, said that under the light control mode, after dark (dusk) open load; after dawn (Dawn) load to stop working.</p> <p>Set to: 24H represents the load has been open until the battery voltage protection automatically disconnects the load;</p> <p>Set time: 01H to 23H, said under the next delay lighting control mode, the load is loaded loaded loaded automatically after a delay before disconnecting a few hours in the evening and applications. (Expressed as the number of time delay)</p>
Interval H	<p>An interval of time setting (set this time, Dawn to Evening; to stop working load time)</p> <p>Set to: 00H indicates Evening to Dawn without the interval or intervals of 0H</p> <p>Set to: 01H to 24H represents Evening to Dawn stopping power load time (corresponding to the numbers indicate the length of time delay).</p>
Dawn H	<p>Load output state is set: the length of the second opening hours or workload;</p> <p>Set to: 00H means no load open or the length of time the load power 0H;</p> <p>Set: 01H24H said opening a load length of time; (numbers indicate the length of time corresponding to the open load).</p>

Certifications

Parameters / Model	MPPT10	MPPT20	MPPT30	MPPT40
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Maximum power current	12A	20A	30A	40A
Installation Lin(mm ²)	4mm ²	8mm ²	10mm ²	12mm ²
Installation Line(AWG)	10(AWG)	8(AWG)	7(AWG)	6(AWG)
Weight	280g	300g	475g	480
Dimensions	143×89×46(mm)		187*97*61(mm)	
System load loss	≤13mA			
Loop Buck	≤100mV			
Battery float voltage	13.8V(12V system)/27.6V(24V system)			
Battery (under voltage) protection	10.6V(12V system)/21.2V(24V system)			
Battery (under voltage) recovery voltage	12.6V(12V system)/25.2V(24V system)			
Charge mode	MPPT+PWM MODE			
Operating Temperature	-10℃~60℃			
Storage Temperature	-30℃~70℃			
Humidity requirements	≤90%, No condensation			
Temperature compensation	-4mV/Cell/℃			
Temperature Probe (built components)	NTC 100K thermistats			
Maximum open circuit voltage of the solar panel	18V-24V(12V system)36V-48V(24V system)			
Solar panels maximum open circuit voltage (V)	≤48V			