

**MPT-7210A**

**Solar Controller**

# I. Introduction

MPPT stands for Maximum Power Point Tracking (MPPT), MPPT controller solar charge controller is the traditional lead product upgrade. MPPT voltage generating real-time detection of solar panels to track the highest voltage and current (vi) adjusting the electrical module through extension work state, so that the maximum power output of the system to charge the battery. MPPT controller used in solar photovoltaic systems, coordination of solar panels to charge the battery, is the brain of the PV system.

The controller uses advanced software algorithms initiative rope move, quickly and accurately tracking the maximum power point of photovoltaic panels module voltage, active tracking work at the maximum power point of the solar cell module in order to get more solar energy. Enhance the charging current and power generation.

## 2、 The product parameters

(1) Input voltage: DC12-60V

( 2 ) Output voltage: DC15V-90V can be the key to set voltage is continuously adjustable to accommodate 24V / 36V / 48V / 72V battery pack

(3) Output Current: 0-10A key settings can be continuously adjustable  
Output Power: 600W maximum output power of best-fit 100W-600W

solar panels, the greater the power, MPPT effect is more obvious.

( 4 ) Scope: 20W-600W, applicable 12-60V solar panels to the battery group, lithium battery packs, distributed household photovoltaic power generation systems, solar car wind turbines, solar street lamps.

( 5 ) Module properties: Controller MPPT tracking accuracy and industry-leading conversion efficiency, automatic charge only of management, high efficiency step-MPPT solar panel controller, dedicated to batteries and lithium battery charge management.

( 6 ) Display interface: Color LCD voltage / current / power / charge status.

( 7 ) Mode: MPPT / DC-DC two options. MPPT of photovoltaic panels application, DC-DC step-up power applications.

( 8 ) Charging options: charging mode can be freely set, built and set their own 20 sets of data storage, support of a machine.

### **3、 Wiring**



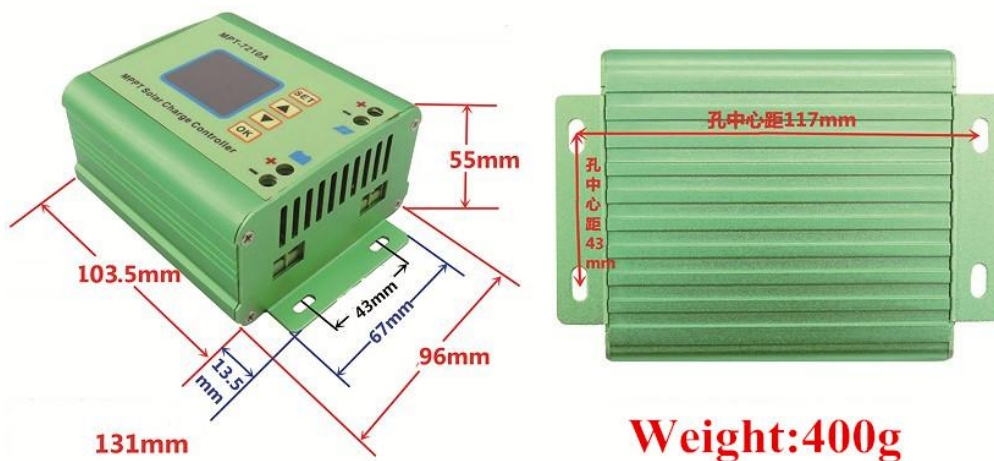
Please note that in strict accordance with the wiring diagram in the instructions, make sure the input and output do not pick the wrong line positive and negative do not quit rice. All electrical equipment must eliminate the live wiring, ranging from live action or line equipment will burn, weight will lead to personal injury and property damage

(1)、 the first pick of the solar cell, the positive and negative attention, do not reverse and reverse, the controller does not show that the controller will not damage internal components.

(2)、 then connect the battery wires, the positive and negative attention, do not reverse; if there is sunshine, the solar charge current display, otherwise check the connections on the right. Note: The solar panels

should be placed outdoors, all illuminated in the sun!

## 4、 Dimensions Mounting Figure

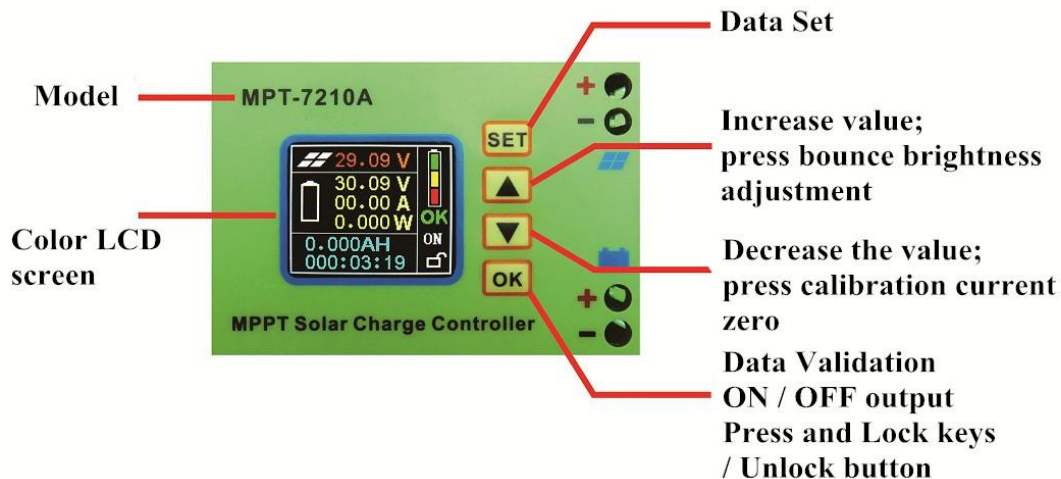


Install the controller at -10 degrees to 60 degrees, a relatively dry environment.

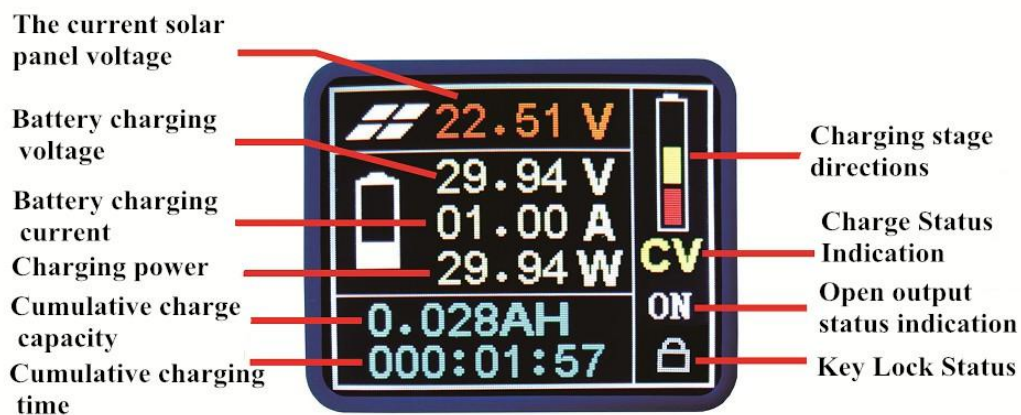
Display devices are easy to pollution easily broken, the installation process and avoid touching the collision force, use screws to secure the controller firmly, avoid installation in order to avoid irreparable damage to the internal circuitry in severe vibration device.

Avoid long-term exposure to the sun, to guard against rain.

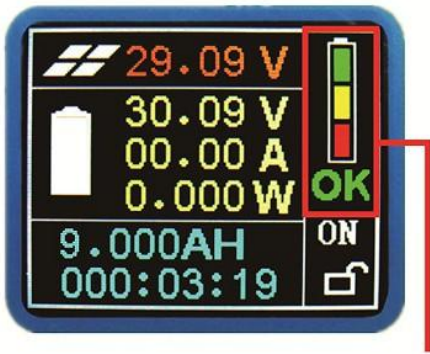
## 5、 Panel



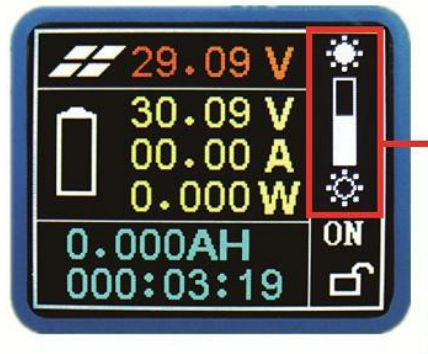
## 6、 Display Description







Charging has completed prompt



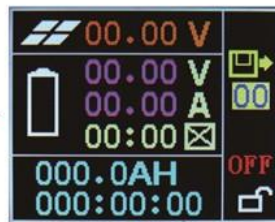
Dimming Tips

## 7, the steps

The instrument uses 160 \* 128 high-resolution color LCD display, with interactive menus and flexible buttons, allowing you to operate special square wave. Below 18V 100W solar panels 24V 7.2AH battery charging example to explain the procedure.



Power display interface, showing currently measured solar panel voltage 19.02V.



Short press **SET**, to start the data group setting



Press **▲** or **▼** can be selected through the previously stored data set



Press **▲** or **▼** solar panel voltage is set to 18V



Press **SET** to start the solar panel voltage setting



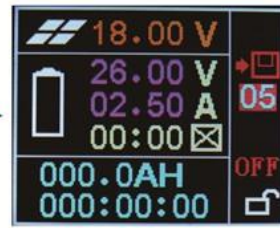
Press **▲** or **▼** the data set is set on the group



Press **SET** and **▲** will limit the battery charging voltage is set to 26V



Press **SET** and **▲** the battery charging current limit is set to 2.5A



Press **SET** if the tips above set data storage In the first 05 data sets press **▲** or **▼** to change the storage location of the data set, press **OK** storage settings, press **SET** to repeat the setup process.

Turn the next line



Press **SET** after let go can be set to turn off the screen time, by **▲** or **▼** buttons to set the screen automatically turns off 1 minute



Press **SET** and **▲** the battery capacity is set to 7.2AH.



Press **SET** and **▲** to set the timer charging time is 1 hour 50 minutes. time to reach can not be set to automatically stop charging



Whether immediate or short press (SET) can be set to call up the data in this group. confirm the data is correct, press (OK) to open the output to start charging

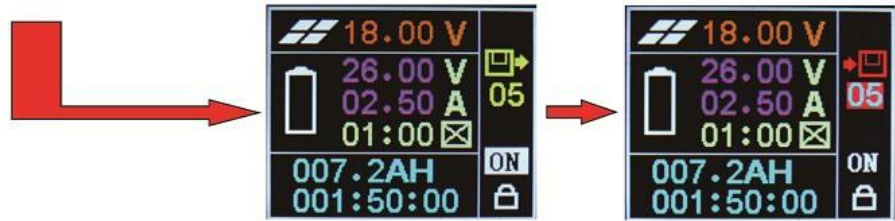


Press (up arrow) button is set to the locked state, in this state, unless a long press unlock the other key is invalid, to prevent misuse



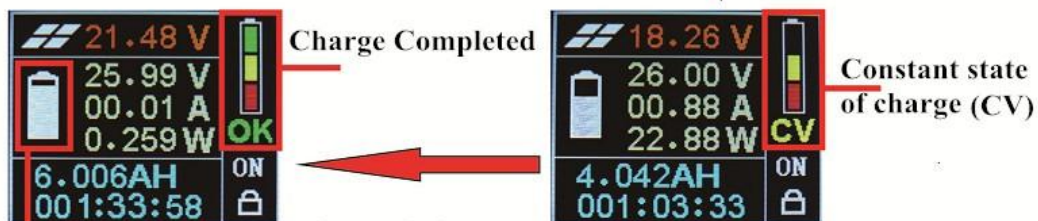
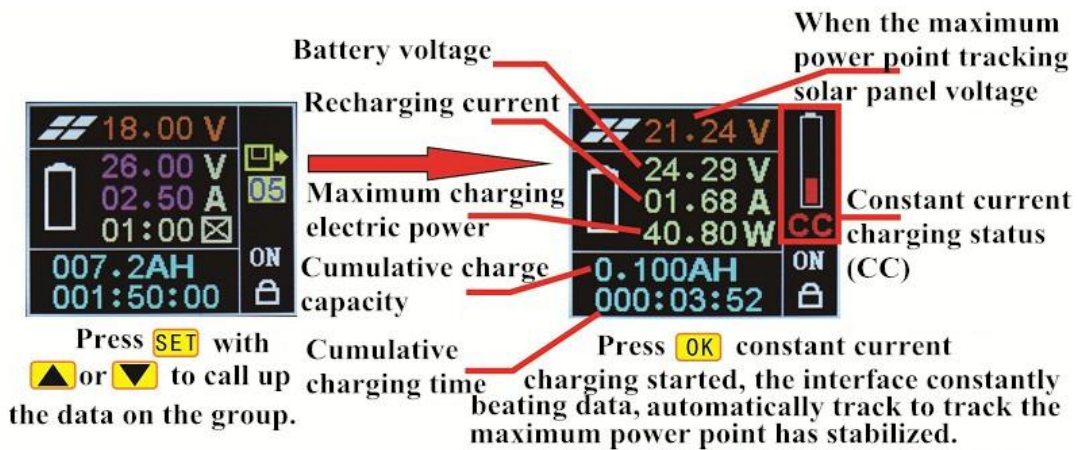
Press (SET) to enter the Lock Settings





Press **▲** or **▼** is set to ON state, of this set of data is set immediately output to start charging. Press **SET** if the tips above setting data stored in the first data set 05

Above to call up the process and save the settings set and data set of the data controller. Solar panel voltage recommends setting its nominal value, such as do not know, you can set Found 19.02V on power-up. Battery charging set voltage and current values must not exceed the limits of the battery, otherwise there is the risk of burn out of the battery, a fully charged battery is generally set to the state of the output voltage and the maximum permissible charging current value. Here's how to call up the data set above the battery charging process.



Battery symbol is not fully charged, the actual charge has been completed, because the actual nominal 7.2Ah battery charge and discharge capacity is only 6Ah, it suggested that the battery capacity can be set to 6Ah.

With the increase of the amount of charge, began to enter the constant state of charge, the charge current gradually decreases until the battery is fully charged.

In any process, press **OK** to lock or unlock the keys, key lock recommend long-term use. it is recommended to set a good time to turn off the screen, lower power consumption, such as engineering, long-term use, do not set the timer charging time, prevent the arrival time after the controller has stopped working.

Here's how to adjust the screen brightness and fan speed operation.

