

# HC-600W Charger Controller Manual



## The Controller Device description

1. Supports the automatic battery charging using the renewable power sources – solar power and wind power - in case of the battery voltage dropping lower than 10V (for 12V battery system) or 20V (for 24V battery system). The charging process will automatically start at battery voltage of 10V (for 12V battery system) or 20V (for 24V battery system) and stop at 12V/24V respectively, charging up to 80% of full battery capacity.
2. An infrared detector and light detector may be connected to HC-600W for more applications.
4. HC-600W employs a micro IC, and has complete protection functionality.
5. HC-600W may be installed in the outdoor power panel, without the necessity of cooling fans.

## LED Functions description

1. The LED1 (solar input) or LED2 (wind input) turn ON when input voltage is higher than 12.7V (for PV power input) or 27.6V (for wind power input), and HC-600W start to charge the battery. The LED1 (or LED2) will turn OFF when the input voltage is below 11.0/22.0V respectively.
2. The power output indicator LED3 will turn ON when the voltage is higher than DC 10.0/20.0V, and the light will turn OFF when the voltage is below DC 10.0/20.0V in case of over discharging.
3. The charging indicator LED4 will turn ON as HC-600W is charging the batteries. Once the battery is full, the “fake charging prevention mode” will be activated, and the LED light will turn ON and OFF every 60 seconds showing that the HC-600W attempts to detect the health status of the battery.
4. The battery indicator LED5 will turn ON when the power voltage is higher than 8.0/16.0V, and will turn OFF when it is below 8.0/16V. If LED5 keeps being OFF, it may mean that the battery health is bad. Please change the battery.



## Specifications

Function\Type	Solar	Wind
Voltage Input Range	12.7~90Vdc	18~90Vac
Output Voltage	12/24Vdc	
Rated Charging Current	20A	20A
Rated Charging Voltage	12.7/25.4Vdc	
Battery Full Charging	15.0/30.0Vdc	
Rated Current for Load	25A max	
Weight	500g	
Dimensions (L*W*H)	140*95*90mm	

# Installation Diagram

