## MPPT SOLAR CHARGE CONTROLLER



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The maximum power point (MPPT) is mainly affected by the ambient temperature and the intensity of sunshine. This MPPT solar controller can intelligently detect the voltage of solar panel, and regulate the solar panel output voltage to make it work at the maximum power point of V-A curve. Compared with ordinary solar controller, this MPPT controller increases the efficiency of PV modules by about 30%. However, due to many factors, such as the different workmanship in making solar panel, the changing sun illuminance, the changing temperature, and the efficiency of the controller etc., the efficiency actually increases 10%-30%.

## PRODUCT FEATURES

- Applicable for various types of batteries
- Step up function enable it to charge when PV voltage as low as 10V/20VDC
  - Maximum Power Point Tracking makes efficiency up to 99.9%
    - Temperature compensation
      - Over-load protection >
      - Over-charge protection
    - Over-discharge protection
      - Short circuit protection >
        - Lightning protection >
    - Reverse polarity protection •

## **■ SPECIFICATIONS**

Model	MPPT12/24 - 10	MPPT12/24 - 15	MPPT12/24 - 20
Rated Voltage	12/24V DC		
PV voltage	10-40V / 20-65V		
PV over-voltage protection	65V		
Max. charge current	10A	15A	20A
MPPT efficiency	≥99%		
Battery types	12V or 24V rechargeable Lead-acid battery(AGM, gel)/Lithium iron phosphate battery		
Self consumption, standby	<40mA		
Self consumption with load	<130mA		
Regular charge voltage	14.6V(14-15V settable)/29.2V(28-30V settable)		
Float charge voltage	13.8V/27.6V		
Over charge disconnection	17V/34V		
Over discharge disconnection	11V(10.4-11.4V settable)/22V(20.8-22.8V settable)		
Over discharge recovery	12.8V( 12.2-13.2V settable)/ 25.6V(24.4-26.4V settable)		
Temperature compensation	-3mv/°C		
Environment temperature	-25°C~+55°C		
Protection level	IP20		
Cross section of cable	Max 16mm²		
Size	172*126*75mm		