

## Key Features

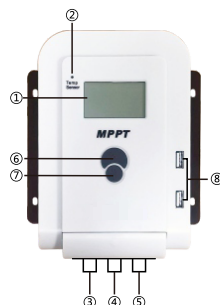
- ◆ MPPT solar charge controller 12/24VDC10-60A
- ◆ Max PV input 100V MPPT efficiency >99%
- ◆ LCD display for PV, battery parameter and working status
- ◆ Four stages charging to extend battery life
- ◆ Selectable Battery :Sealed, Gel, Flooded, Lithium, User defined battery
- ◆ With Temperature Compensation and current limiting charging
- ◆ With Lithium battery activation Function
- ◆ Selectable Load Working Mode



MPPT-Q 10-60A

## Technical Specifications

| Model                         | MPPT-2410Q  | MPPT-2420Q    | MPPT-2430Q    | MPPT-2440Q    | MPPT-2450Q    | MPPT-2460Q    |
|-------------------------------|---|---------------|---------------|---------------|---------------|---------------|
| System voltage                | 12V /24V Auto   |               |               |               |               |               |
| Battery voltage range         | 8~32V   |               |               |               |               |               |
| Max charging current          | 10A   | 20A           | 30A           | 40A           | 50A           | 60A           |
| USB Charging                  | 2USB*5V2A,<br>100V@ MPPT24*QM   |               |               |               |               |               |
| Max PV voltage                | User default, Sealed, Flooded, GEL, LiFePO4, Li(NiCoMn) O2. Among them, User default, <b>LiFePO4, Li(NiCoMn)O2 can change parameters.</b> |               |               |               |               |               |
| Battery type                  |   |               |               |               |               |               |
| Equalize charge               | SLD: 14.6V, GEL: null, FLD: 14.8V   |               |               |               |               |               |
| Absorption charge             | SLD: 14.4V, GEL: 14.2V, FLD: 14.6V  |               |               |               |               |               |
| Float charge                  | GEL,SLD,FLD: 13.8V  |               |               |               |               |               |
| Low voltage disconnection     | GEL,SLD,FLD: 10.8V  |               |               |               |               |               |
| Low voltage reconnection      | GEL,SLD,FLD: 12.6V  |               |               |               |               |               |
| High Voltage Disconnection    | 16V@12VDC, Else times.  |               |               |               |               |               |
| Duration of absorption Charge | 2hours  |               |               |               |               |               |
| duration of equalized charge  | 2hours  |               |               |               |               |               |
| Lithium battery activation    | YES .   |               |               |               |               |               |
| Charge method                 | 4-stages: Equalized, CC(Constant Current), CV(Constant Voltage), CF(Floating Charge)  |               |               |               |               |               |
| Temperature compensation      | -4mV/°C/2V (default)  |               |               |               |               |               |
| MPPT efficiency               | ≥ 99.5%   |               |               |               |               |               |
| No load consumption           | 12V@9.7mA, 24V@11.7mA   |               |               |               |               |               |
| Rated load current            | 10A   | 20A           | 30A           | 40A           | 50A           | 60A           |
| Load DC voltage               | Same as battery voltage.  |               |               |               |               |               |
| Charge loop voltage drop      | < 029V  |               |               |               |               |               |
| Discharge Loop Voltage drop   | <0.16V  |               |               |               |               |               |
| Load control mode             | Normal Mode, On\Off mode, light Control Mode , Dual-time control mode,  |               |               |               |               |               |
| light control voltage         | 5V  |               |               |               |               |               |
| Low voltage protection        | 10.5V(default), 11V(restored), settable   |               |               |               |               |               |
| Setting parameter             | by controller or by PC software /APP ( Option)  |               |               |               |               |               |
| LCD Display                   | Charge stage; PV VDC AMP; Charger VDC AMP; Bat VDC, Amp Type %; Temp; Load VDC AMP; Working Mode' Alarm                                   |               |               |               |               |               |
| Communication                 | All OPTION: RS485 for PC or Modbus; WiFi APP, BlueTooth. GRPW   |               |               |               |               |               |
| Working temperature           | -20 ~ +55 °C  |               |               |               |               |               |
| Storage temperature           | -30 ~ +80 °C  |               |               |               |               |               |
| Humidity                      | 0 ~ 90%, nocondensation   |               |               |               |               |               |
| Grounding                     | Positive grounding  |               |               |               |               |               |
| Communication mode            | RS485, RJ45 port  |               |               |               |               |               |
| Product size mm               | 176*140*41  |               | 215*170*70    |               | 270*185*70    |               |
| PCS / CTN                     | 40  | 40            | 16            | 16            | 8             | 8             |
| CTN KG                        | 18.5  | 18.5          | 23.5          | 23.5          | 20.5          | 20.5          |
| CTN mm                        | 510*415*315mm   | 510*415*315mm | 485*440*400mm | 485*440*400mm | 600*470*205mm | 600*470*205mm |
| ATTENTION::                   | 150V @ MPPT24*QS , 100V@ MPPT24*QM  |               |               |               |               |               |



- ① LCD
- ② Temperature sensor interface(Selection)
- ③ Photovoltaic array terminals
- ④ Battery terminal
- ⑤ Load terminal
- ⑥ Menu Button
- ⑦ Set Button
- ⑧ USB output