

MPPT Solar Charge Controller

TW-GY series (96V\192V\216V\240V\384V Auto 50A\60A\80A\100A)



GY series is a high-power maximum power point intelligent tracking (MPPT) solar charging controller with PV wide voltage range input, adjustable charging voltage, RS485/LAN communication, modular design, small size, light weight and high conversion. The advantages of efficiency, etc., are the highest-end high-power MPPT solar charging controller currently applied to off-grid systems.

| Series name | Battery system | PV maximum open circuit voltage | Rated current |
|--------------------|----------------|---------------------------------|---------------|
| GY-B96-XXA | 96V (8*12V) | 430V | 70A~100A |
| GY-B192-XXA | 192V (16*12V) | 430V | 50A~100A |
| GY-B216 (220) -XXA | 216V (18*12V) | | |
| GY-B240-XXA | 240V (20*12V) | | |
| GY-B384-XXA | 384V (32*12V) | 850V | 70A~80A |

Characteristics

1. Efficient MPPT controller algorithm, MPPT efficiency is not less than 99.5%, and the conversion efficiency of the whole machine is up to 98%.
2. Charging mode: third-order charging (constant current, constant voltage, floating charge) can effectively extend the life of the battery.
3. LOAD mode has normally open / normally off mode, light control mode, dual time control mode, light control - fixed time control mode.
4. Customers can choose to charge 3 types of commonly used batteries (sealed lead-acid batteries, colloidal

lead-acid batteries, open lead-acid batteries), and can customize the parameters to charge other types of batteries.

5. With current limiting charging function, when the user's battery board power is too large, the controller automatically maintains the charging power, and the charging current will not exceed the rated value.

6. Support multiple machines in parallel to achieve system power upgrade.

7. With high-definition LCD display function, you can view the running data and working status of the device, and support the setting of related parameters.

8. RS485 communication, can provide communication protocol, convenient for customers to integrate management and secondary development.

9. Support PC software monitoring, support WIFI module expansion to achieve app cloud monitoring.

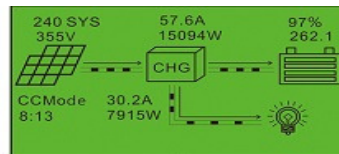
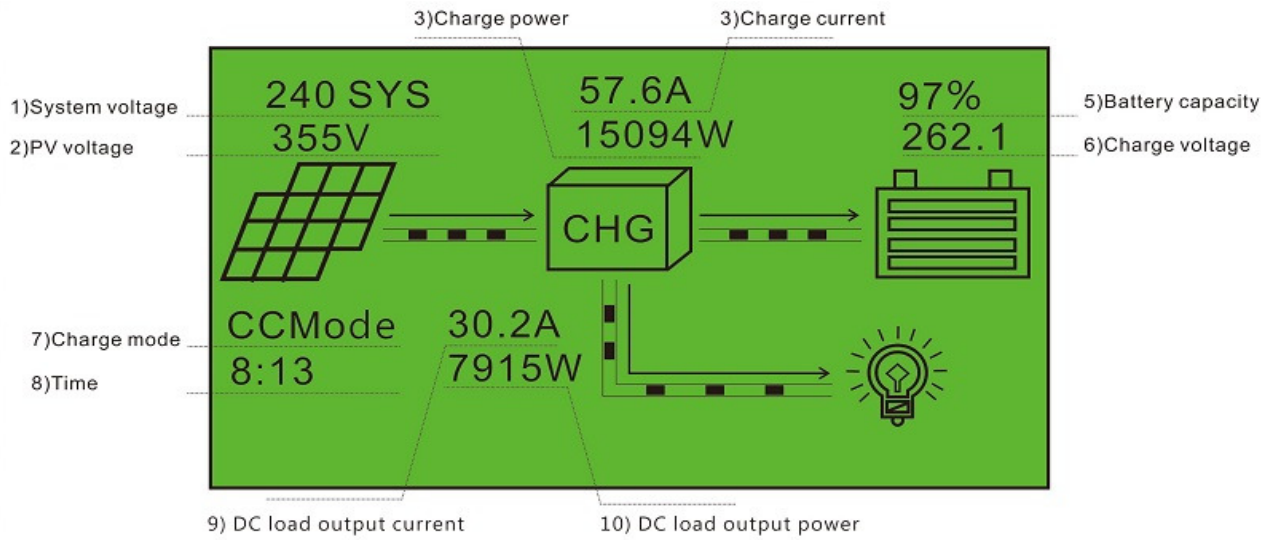
10. The products have passed CE, ROHS and FCC certification; they can cooperate with customers to pass various certifications.

11. The normal warranty period is three years, and it can provide 3~10 years extended warranty service.

| GY | Product Series | GY-B96 | | | GY-B192\GY-B216 (220) \GY-B240 | | | | | GY-B384 | |
|-----------------------|---------------------------------|---|-------|-------|---|----------------|----------------|----------------|----------------|---------------|--------|
| | Power division | 70A | 80A | 100A | 50A | 60A | 70A | 80A | 100A | 70A | 80A |
| Product Category | Controller type | Controller with maximum power point tracking (MPPT) | | | | | | | | | |
| | MPPT efficiency | ≥99.5% | | | ≥99.5% | | ≥99.5% | | | ≥99.5% | |
| | System voltage | DC96V | | | DC192V\DC216V(DC220V)\DC240V | | | | | DC384V | |
| | Voltage identification range | DC72V~DC128V | | | DC144V~DC256V\DC162V~DC288V\DC180V~DC320V | | | | | DC288V~DC512V | |
| | Heat dissipation method | Forced air cooling | | | | | | | | | |
| Input characteristics | Open circuit voltage Vmax-pv | DC430V | | | DC430V | | DC660V | | | DC850V | |
| | Start charging Vstart-pv | Vbat+20V | | | Vbat+20V | | Vbat+20V | | | Vbat+20V | |
| | Low voltage protection Vlow-pv | Vbat+10V | | | Vbat+10V | | Vbat+10V | | | Vbat+10V | |
| | Overvoltage protection Vover-pv | DC430V | | | DC430V | | DC660V | | | DC850V | |
| | Rated input power | 7280W | 8320W | 10400 | 10400W\11700W\ | 12480W\14040W\ | 14560W\16380W\ | 16640W\18720W\ | 20800W\23400W\ | 29120W | 33280W |

| | | | | | | | | | | | |
|--------------------------|-------------------------|---|-----|------|----------------------|--------|-------------|--------|--------|-------------|-----|
| | | | | | 13000W | 15600W | 18200W | 20800W | 26000W | | |
| Charging characteristics | Applicable battery type | Sealed lead-acid battery, colloidal lead-acid battery, open lead-acid battery (can be customized for other types of batteries) | | | | | | | | | |
| | Rated charging current | 70A | 80A | 100A | 50A | 60A | 70A | 80A | 100A | 70A | 80A |
| | charging method | Three stages: constant current (fast charge), constant voltage, floating charge | | | | | | | | | |
| Load characteristics | Load voltage | Same battery voltage | | | Same battery voltage | | - | - | - | - | - |
| | Rated load current | 70A | 80A | 100A | 50A | 60A | - | - | - | - | - |
| | Load control method | Normally open normally closed mode\ dual time control mode\ light control mode\ light control-fixed time control mode | | | | | - | - | - | - | - |
| Display\communication | Display method | LCD128*64 dot matrix backlight display | | | | | | | | | |
| | communication method | 8-pin RJ45 interface / RS485 / support host computer monitoring / support WIFI module expansion to achieve app cloud monitoring | | | | | | | | | |
| Other characteristics | Protective function | Input and output over-voltage protection, anti-reverse protection, etc. | | | | | | | | | |
| | Working temperature | -20℃~+50℃ | | | | | | | | | |
| | Storage temperature | -40℃~+75℃ | | | | | | | | | |
| | IP protection level | IP21 | | | | | | | | | |
| | net weight | 14.7kg | | | 14.7kg | | 18.8kg | | | 18.8kg | |
| | Gross weight | 16.6kg | | | 16.6kg | | 20.6kg | | | 20.6kg | |
| | Product size (mm) | 371*500*187 | | | 371*500*187 | | 391*500*227 | | | 391*500*227 | |
| | Packing size (mm) | 590*420*270 | | | 590*420*270 | | 590*440*320 | | | 590*440*320 | |

LCD display



Main Menu

- 1.Work Status
- 2.Setting
- 3.Information

Normal Mode

Fault: NoFault
CC Charging
PV Volt: 355V

Normal Mode

Chg Curr : 57.6A
Chg Powr : 15094W
Chg Volt : 262.1V

Normal Mode

Bat Temp: 28C
HS Temp: 48C
Load Curr: 30.2A

Setting

- *1.Ethernet set
- 2.Load Set
- 3.Time&Data Set

Setting

- 1.Ethernet set
- *2.Load Set
- 3.Time&Data Set

Setting

- 1.Ethernet set
- 2.Load Set
- *3.Time&Data Set

Setting

- 2.Load Set
- 3.Time&Data Set
- *4.Bat Set

Information

MPPT CHARGER
240V 60A
240V BAT CHG SYS

IP:192.168.1.18
GT:192.168.1.1
Port:8888
ADR:1

Load: Time Ctrl
Total: 22.7KWH
Firmware: 1.0
Bat: CustomDef