

New eSmart3 series MPPT solar controller 20A 30A 40A



eSmart3 series is the third generation of [eSmart mppt controller](#), combined with the second generation of high conversion efficiency, back-light LCD display, control mode, connect way, internal structure etc. features, also optimized the following points:

1. Increase all kinds of protection function to be used more reassuring.
 2. Add the LOAD sampling to be used more clear of output load.
 3. Wider PV Input voltage than eSmart2, so it suitable for more kinds of PV modules
 4. Reduce the static standby self-consumption, energy saving and more simply for small system.
- Choose eSmart3, more intelligent in life!



MPPT Solar Controller 12V24V36V48 50A-60A

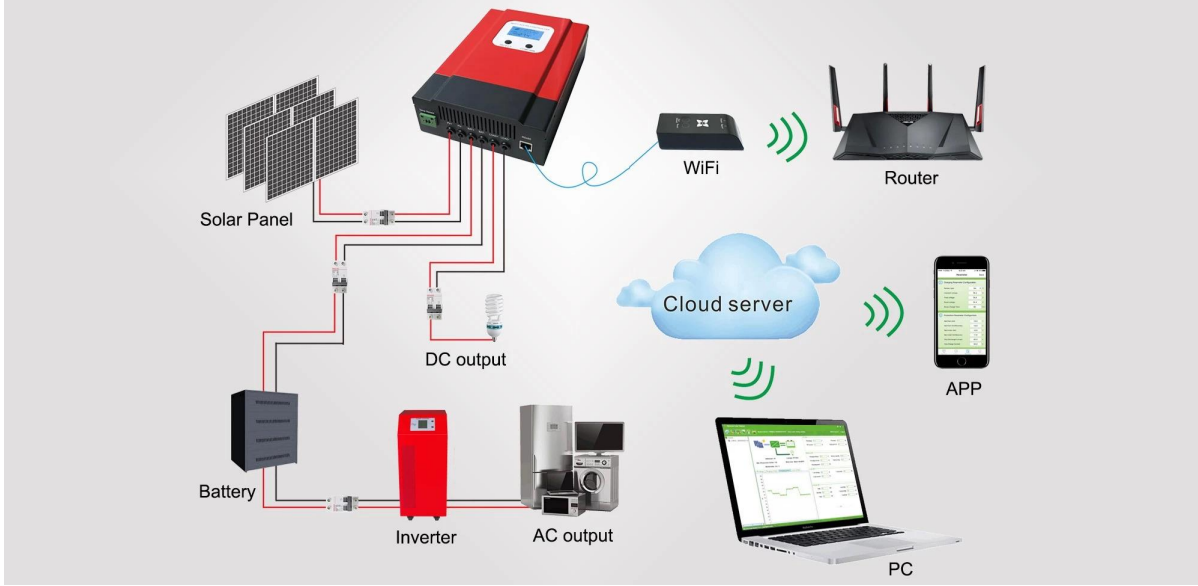


Features

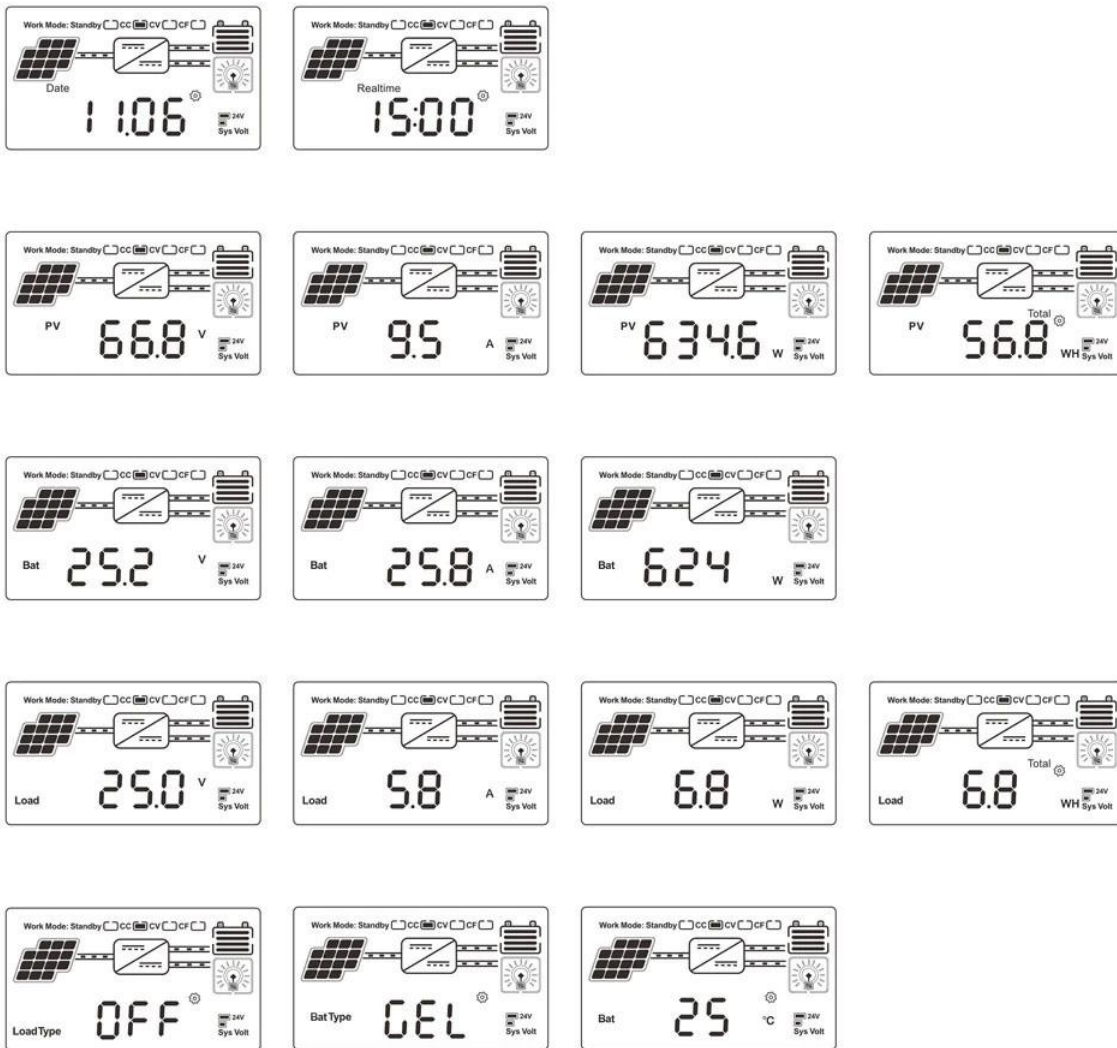
- 1.It has an efficient MPPT algorithm, MPPT efficiency $\geq 99.5\%$ and converter efficiency up to 98%.
- 2.Charge mode: three stages (constant current, constant voltage, floating charge), it prolongs service life of the batteries.
- 3.Four types of load mode selection: ON/OFF, PV voltage control, Dual Time control, PV+Time control .
- 4.Battery system voltage automatic recognition.
- 5.Three kinds of commonly used lead-acid battery (Seal\Gel\Flooded) parameter settings fcan be selected by the user, and the user can also customize the parameters for other battery charging.
- 6.It has a current limiting charging function. When the power of PV is too large, the controller automatically keeps the charging power, and the charging current will not exceed the rated value.
- 7.High definition LCD display function to check the device running data and working status, also can support modify the controller display parameter.
- 8.RS485 communication, we can offer communication protocol to convenient user's integrated management and secondary development.
- 9.Support PC software monitoring and WiFi module to realize APP cloud monitoring.
- 10.CE, RoHS, FCC certifications approved, we can assist clients to pass various certifications.
- 11.2 years warranty, and 2~10 years extended warranty service also can be provided.

[MPPT Controller](#) connection diagram

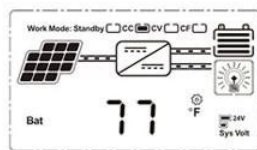
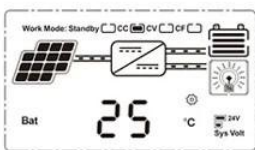
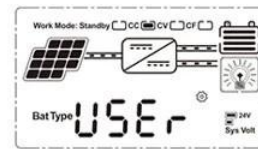
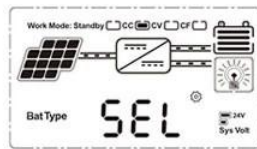
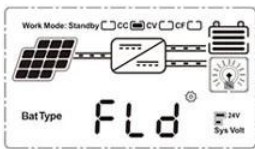
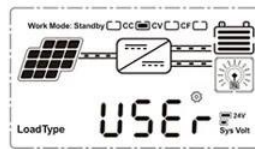
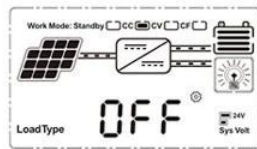
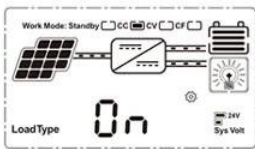
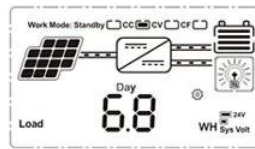
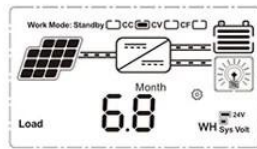
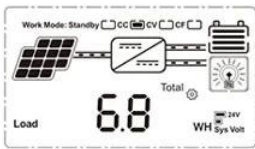
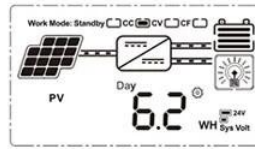
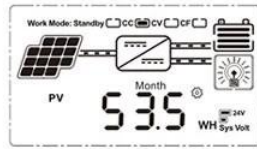
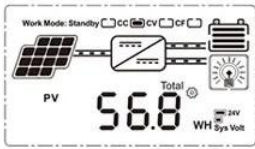
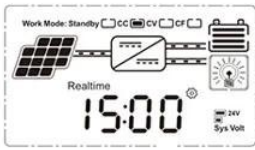
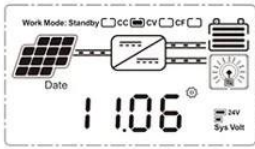
Off Grid Solar System CPU



Parameters Display & Setting information



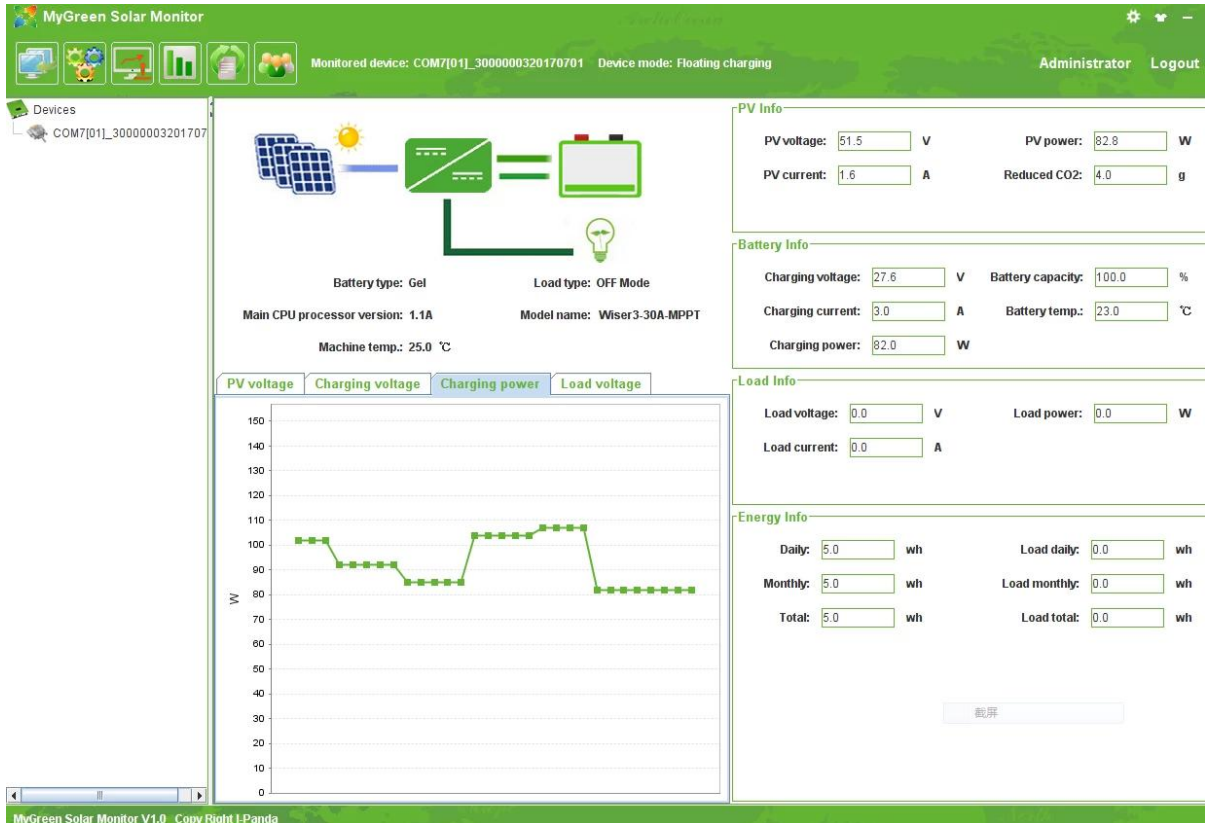
LCD display information



| | | | |
|------|-------------|-----|------------|
| On | Mean "ON" | FLD | Mean "FLD" |
| OFF | Mean "OFF" | GEL | Mean "GEL" |
| USER | Mean "USER" | SEL | Mean "SEL" |

Set the battery type and LOAD control mode

Upper Computer Software & Test Software



PC software_SolarEagle

Visual display of charge and discharge status, PV voltage, charge voltage, charge current, and can set the battery type, LOAD output control;

Parameter

| eSmart3 series | | 40A | | |
|-----------------------------|------------------------------------|--|-------------------------------------|-------|
| Product category | Controller Properties | | MPPT (maximum power point tracking) | |
| | MPPT efficiency | | ≥99.5% | |
| | Standby power | | 0.5W~1.2W | |
| | System voltage | | Automatic recognition | |
| | Heat-dissipating method | | Intelligent fan cooling | |
| Input Characteristics | Max.PV input voltage(VOC) | | DC150V | |
| | Low input voltage protection point | | Battery voltage + 2V | |
| | Over voltage protection point | | DC150V | |
| | Rated PV power | 12V system | | 520W |
| | | 24V system | | 1040W |
| | | 36V system | | 1560W |
| 48V system | | 2080W | | |
| Selectable Battery Types | | Sealed lead acid, Gel battery, Flooded | | |
| (Default Gel battery) | | (Other types of the batteries also can be defined) | | |
| Charge rate characteristics | Charge rate | 40A | | |
| | charging method | 3-Stage: constant current(fast charging)-constant voltage-floating charge | | |
| LOAD Characteristics | Load voltage | The same as the battery voltage | | |
| | Load rated current | 40A | | |
| | Load control mode | On/Off mode, PV voltage control mode, Dual-time control mode, PV + Time control mode | | |
| Display & Communication | Display mode | High-definition LCD segment code backlight display | | |
| | Communication mode | 8-pin RJ45 port/RS485/support PC software monitoring/support WiFi module to realize APP cloud monitoring | | |
| Other Parameters | Protect function | Input-output over \ under voltage protection, Prevention of connection reverse protection,battery shedding protection etc. | | |
| | Operation Temperature | -20°C~+50°C | | |
| | Storage Temperature | -40°C~+75°C | | |
| | IP(Ingress protection) | IP21 | | |
| | Max. connection size | 20mm ² | | |
| | Net Weight (kg) | 2.3 | | |
| | Gross Weight (kg) | 3 | | |
| Product Size(mm) | 240*168*66 | | | |
| Packing Size(mm) | 289*204*101 | | | |

Remark

1. Above is company's standard parameters; any modify please check our official website;
2. We can customize 72V / 96V and other unconventional MPPT controller to special customers, provide OEM and ODM services.