

I-Panda MPPT Solar Smart Digital Controller 50A / 60A



[Explorer](#) develops solar field vision, making nature more beautiful and more efficient

A new generation of MPPT solar intelligent digital controller

- 1, self-heating, waterproof rating IP67
- 2, beautiful design, touch buttons, internal and external repair
- 3, four-stage charging to extend battery life
- 4, tracking efficiency as high as 99.8%
- 5, perfect protection function
- 6, can expand APP, host computer, and unlimited parallel
- 7, can monitor the entire system status, determine system matching, etc.



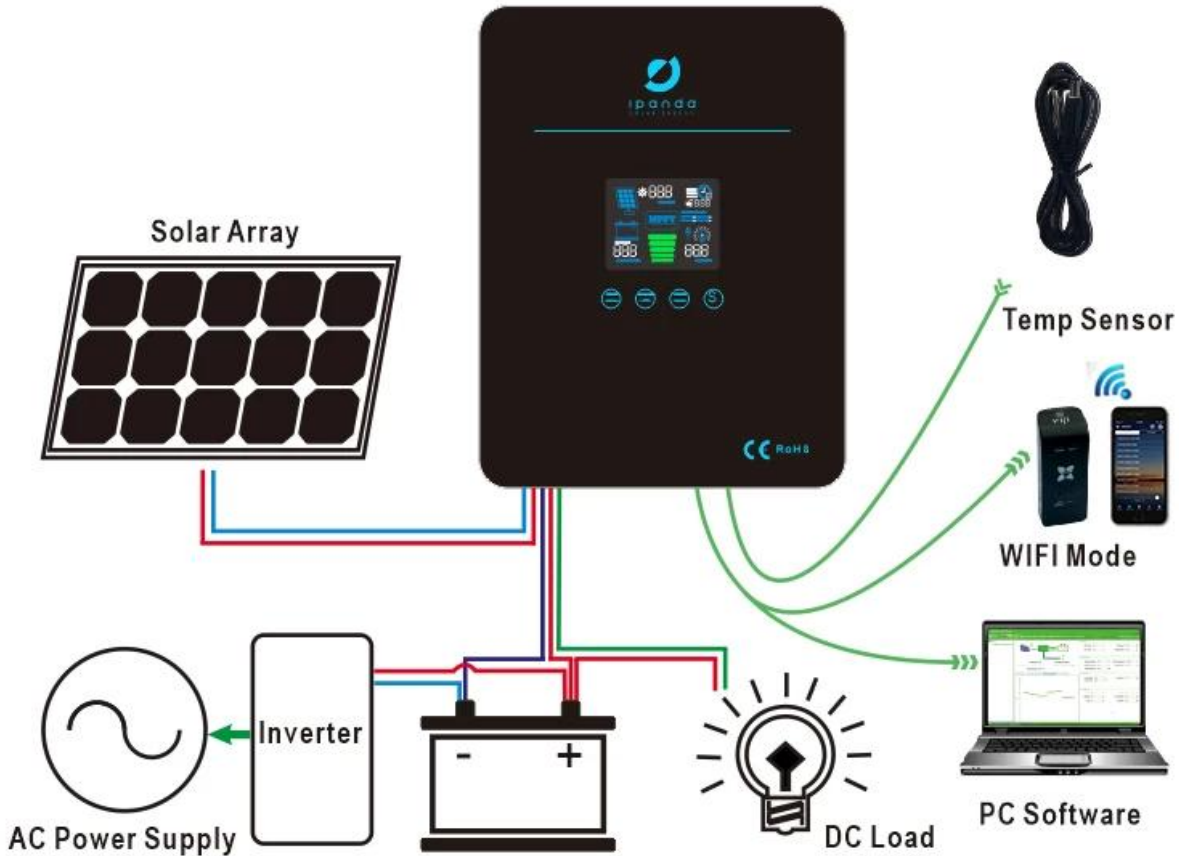
Characteristics

- * High-efficient MPPT algorithm, MPPT efficiency $\geq 99.5\%$.
- * Support Seal/Gel/Flooded battery and customized batteries.
- * Four types of load mode selection: ON/OFF, PV voltage control, Dual Time control, PV+Time control.
- * All-in-one integrated design, high stability and reliability.
- * Current-limited charging function.
- * IP67 protection, natural-cooling.
- * High definition LCD segment display.
- * Intelligent interaction experience.
- * Dual RS485 communication ports, support for parallel communication.
- * Support PC and APP (Android & iOS) monitoring.
- * CE, RoHS, FCC certifications approved.

parameter

| Explorer Series | | Explorer-50A | Explorer-60A | |
|-------------------------------------|---|--|------------------|-------|
| Product Category | Controller properties | MPPT (Maximum power point tracking) | | |
| | MPPT efficiency | ≥99.5% | | |
| | Standby power | 0.5W~1.2W | | |
| | System voltage | 12V/24V/36V/48V auto work | | |
| Input Characteristics | Heat-Dissipating method | Natural -cooling | | |
| | Max.PV input voltage(Voc) | DC150V | | |
| | Start charge voltage point | Battery voltage + 3V | | |
| | Low input voltage protection point | Battery voltage + 2V | | |
| | PV rated power | 12V system | 650W | 780W |
| | | 24V system | 1300W | 1560W |
| | | 36V system | 1950W | 2340W |
| 48V system | | 2600W | 3120W | |
| Charge Characteristics | Battery types (Default Gel battery) | Gel battery, Sealed lead-acid battery, Flooded battery, User-defined | | |
| | Charge rated current | 50A | 60A | |
| | Charge method | 3 stages: CC (Constant current) - CV (Constant voltage) - CF (Floating charge) | | |
| LOAD Characteristics | Load voltage | Same as battery voltage | | |
| | Load rated current | 30A | | |
| | Load control mode | On, Off, PV voltage control, Dual-time control, PV + Time control | | |
| | Low voltage protection | The default protection point is 10.5V, and it is restored to 11V (can be set) | | |
| | Setup method | PC software /Mobile APP/ controller display | | |
| Display & Communication | Display | High-definition LCD segment code backlight display | | |
| | Dry contact access voltage | 5V ~ 12V | | |
| | Communication | Dual RJ45 port/RS485/support PC software monitoring/ support WiFi module for APP cloud monitoring/ support centralized parallel monitoring | | |
| Operating ambient temperature | -20°C~+50°C | | Other Parameters | |
| Storage temperature | -40°C~+75°C | | | |
| IP(Ingress protection) | IP67 | | | |
| Max. Battery wire (mm2/AWG) | 28mm2 | | | |
| Max. Load wire (mm2/AWG) | 28mm2 | | | |
| Recommended breaker | ≥100A | | | |
| Net weight (KG)/Gross weight (KG) | 4.15 / 5.5 | | | |
| Product size (mm)/Packing size (mm) | 290×220×88 / 410×328×193 | | | |
| Protections | Input over/low voltage, output over/low voltage, reverse connection, over temperature, short circuit, battery shedding etc. | | | |

System connection diagram



Remarks:

1. The above is the standard parameters of the company. If there are any changes, please check our official website;
2. Our company can customize non-conventional MPPT controllers for customers and provide OEM and ODM services;
3. [[Click to download the specification](#)]