

# **I-Panda new generation voltage 12V/24V/36V/48V MPPT solar controller**



[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.



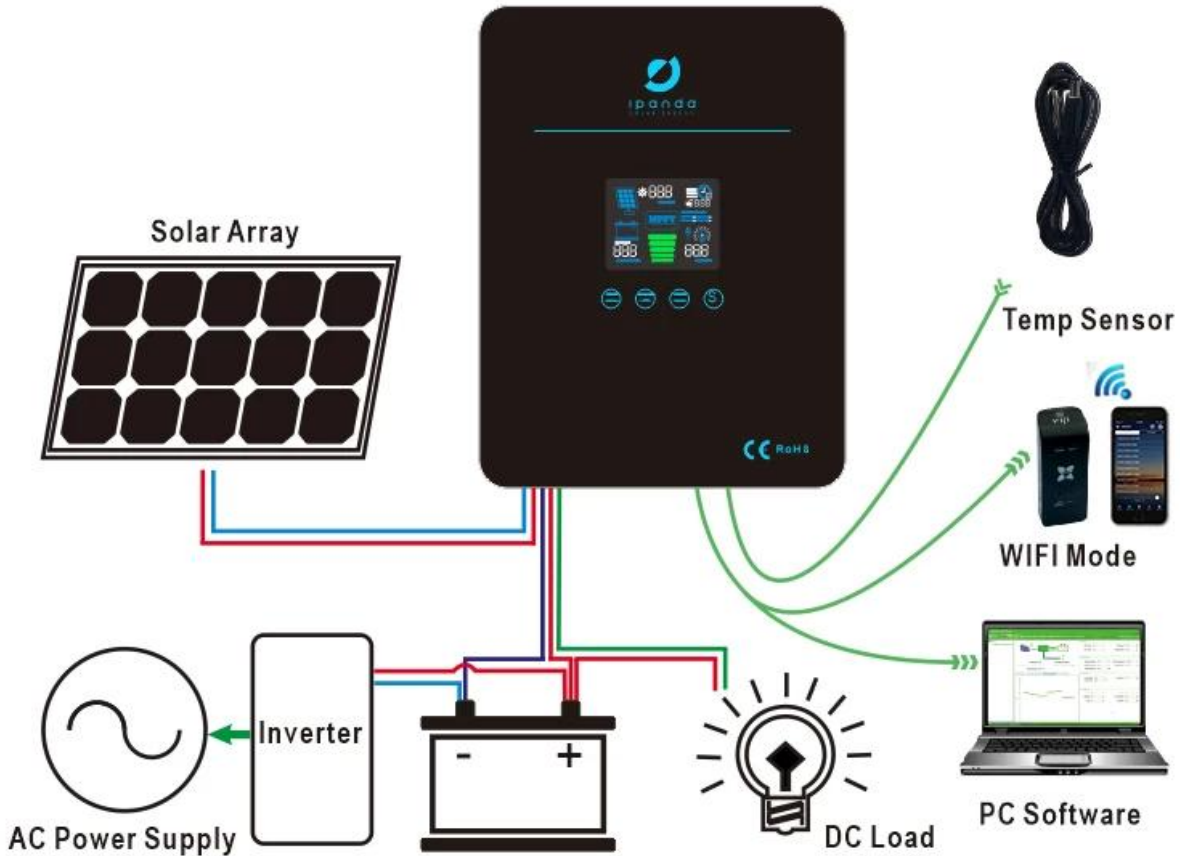
## Characteristics

- \* 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 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](#)]