# I-Panda MPPT Solar Smart Digital Controller voltage 12V/24V/36V/48V 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.



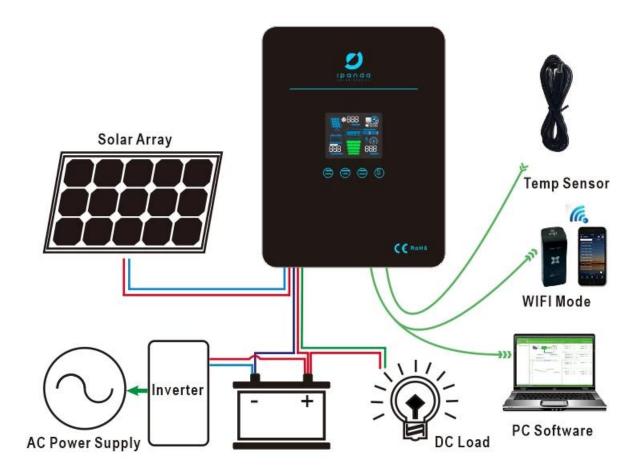
### Characteristics

- \* 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	1		
Controller properties		MPPT (Maximum power point tracking)					
Product Category	MPPT efficiency		≥99.5%		1		
	Standby power		0.5W~1.2W		1		
	System voltage		12V/24V/36V/48V auto work		1		
	Heat-Dissipating method		Natural -cooling		1		
Input Characteristics	Max.PV input voltage(Voc)		DC150V		1		
	Start charge voltage point		Battery voltage + 3V		1		
	Low input voltage protection point		Battery voltage + 2V		1		
		12V system	650W	780W			
		24V system	1300W	1560W	1		
	PV rated power	36V system	1950W	2340W	1		
		48V system	2600W	3120W	1		
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		1		
	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 $11 \ensuremath{V}$ (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/suppor support WiFi module for APP cloud monitorin	t PC software monitoring/ g/ support centralized parallel monitoring	r		Input over/low voltage, output over/low voltage, reverse connection
Operating ambient temperature		-20°C~+50°C			Protections	s over temperature, short circuit, battery shedding etc.	
Storage temperature		-40°C~+75°C					
IP(Ingress protection)			IP67				
Max. Battery wire (mm2/AWG)		28mm2			Other		
Max. Load wire (mm2/AWG)			28mm2		Parameters		
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				

# 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]