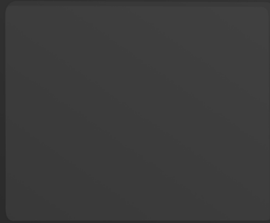




ipanda
SOLAR ENERGY



PV

BAT
up

DC
down

S

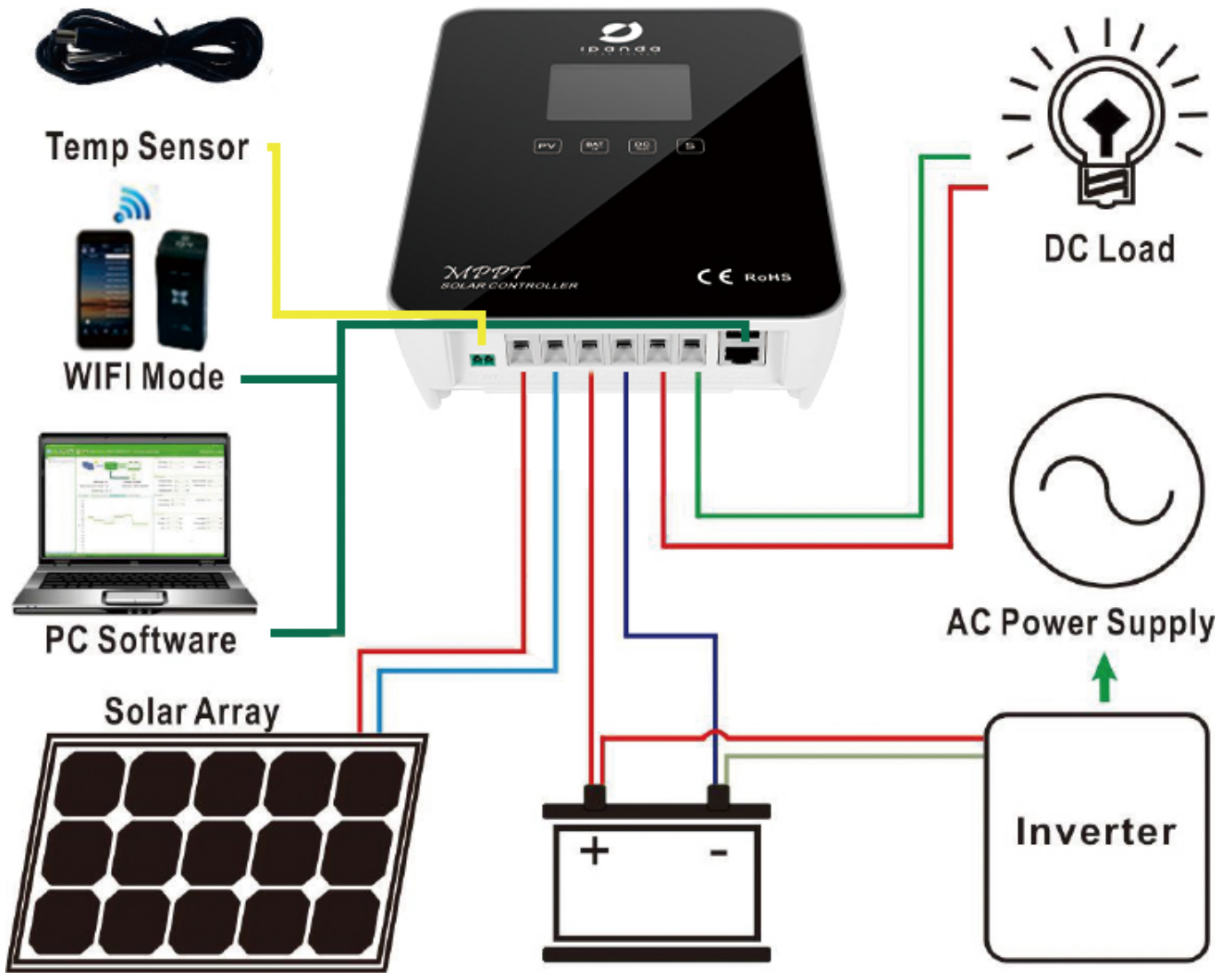
MPPT
SOLAR CONTROLLER

CE RoHS



Characteristics

1. Efficient MPPT algorithm, MPPT efficiency $\geq 99.5\%$
2. Integrated design, stable performance and high reliability
3. With current limiting charging function
4. IP67 level protection, natural cooling
5. Touch button, high-definition color display
6. Intelligent interactive experience
7. Dual RS485 communication interface, support for parallel communication
8. Battery type selection: sealed lead acid battery / flooded battery / gel battery, other battery types (such as lithium battery) can be customized
9. Four LOAD control modes: normally open / normally off mode, light control mode, dual time controller mode, light control + fixed time control mode
10. Support PC software / WiFi module cloud APP monitoring
11. CE, FCC, RoHS certification



Explorer-S Series

Common positive type		ES2420	ES2430	ES2440	ES2450	ES2460	ES4820	ES4830
Product category	Controller Type	MPPT (maximum power point tracking)						
	MPPT efficiency	≥99.5%						
	Standby power	0.5W~1.2W						
	Heat-dissipating method	Self cooling						
	Lead - acid battery	12Vsystem : 9VDC~15VDC 24Vsystem : 18VDC~30VDC 36Vsystem : 32VDC~40VDC 48Vsystem : 42VDC~60VDC						
	Settable lithium ion battery system	8VDC~30VDC					18VDC~60VDC	
Input Characteristics	Maximum input voltage	150VDC						
	Minimum MPPT voltage	Real-time battery voltage + 2V						
	Start charging voltage	Real-time battery voltage + 3V						
	Input low voltage protection voltage	Real-time battery voltage + 2V						
	Input overvoltage protection/recovery voltage	150VDC/145VDC						
	12V Lead acid battery system	260W	390W	520W	650W	780W	260W	390W
	24V Lead acid battery system	500W	780W	1040W	1300W	1560W	520W	780W
	36V Lead acid battery system	---	---	---	---	---	780W	1170W
	48V Lead acid battery system	---	---	---	---	---	1040W	1560W
Settable lithium ion battery system	252W~504W	378W~756W	504W~1008W	630W~1260W	756W~1512W	252W~1008W	378W~1512W	
Charge Characteristic	Lithium battery activation function	Optional						
	Type of battery	Sealed lead acid battery (SEL), gel sealed lead acid battery (GEL), liquid rich battery (FLD), user defined (USE), lithium ion battery (LIT)						
	Rated maximum charging current	20A	30A	40A	50A	60A	20A	30A
	Charge Method	Stage 3: CC (quick charging) - CV (constant voltage charging) - CF (floating charging)						
LOAD Characteristics	Load Voltage	The same as the battery voltage						
	Load rated current	20A		30A			20A	
	Load control mode	on/off mode, light control mode, double time control mode, light control delay mode						
	Load low voltage protection	10.5V(low voltage protection), 11V (low voltage protection recovery), adjustable						
Display & Communication	Display	HD LCD color segment code display						
	Communication	Dual RJ45 interface/RS485 / upper computer software/WIFI module & Bluetooth module mobile phone APP/centralized monitoring						
Other Parameters	Protection Function	Input-output over \ , under voltage protection,Prevention of connection reverse protection,battery shedding protection etc.						
	Operating ambient temperature	-20°C~ +50°C						
	IP (ingress protection)	IP43						
	Max. connection size	28mm ²						
	Recommended battery side circuit breaker	≥40A	≥63A	≥63A	≥100A	≥100A	≥40A	≥63A
	Net Weight/Gross Weight (kg)	1.65/1.98			2.35/2.78			
product size/package size (mm)	220x148x58.8/289x212x105			245x170x68.5/334x255x123				