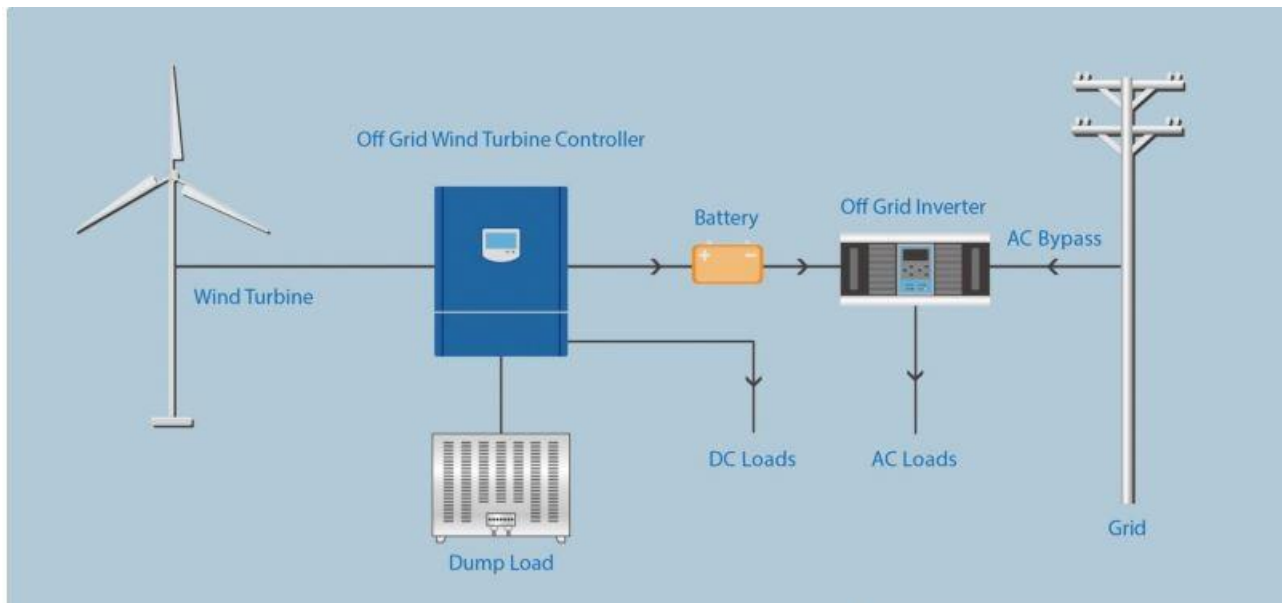


## Off-Grid PWM Wind Solar Hybrid Controller



### FKJ-B model off grid PWM wind solar hybrid controller Product Characteristics

- ◆The product is manufactured according the JB/T6939.1-2004 industrial standard and GB/T 19115.1-2003 national standard also with users' technical requirements.
- ◆Big LCD display.The images tell working state visually.Variou data show: real-time wind turbine voltage,current,power;solar panel voltage,current, power;battery group voltage, charge current.(The main board is with button battery,in case of power failure, history data can be saved for 30 days)
- ◆Two sets of control systems: PWM constant voltage system and three-phase dump load system.
- ◆PWM constant voltage control is 120% of the rated power of the wind turbine. In case exceeding of PWM's capacity, the three-phase dump load will automatically start immediately to ensure safe running of the overall wind turbine system.
- ◆When the strong or super-strong wind conditions PWM control to ensure battery charged by the wind turbine with constant voltage and current.

- ◆When the battery disconnect or damage, the three-phase dump load will start automatically to avoid the wind turbine idling and runaway accident.
- ◆The protection function of battery: polarity reverse protection, disconnection and damage protection.
- ◆Over-charging protection of the battery: When the battery is full (the battery voltage getting 125% of the rated voltage), the controller will carry out three-phase dump load automatically to stop charging the battery.
- ◆Auto recharging of battery: When the battery voltage reduces to 108% of the rated voltage, it stops three-phase dump load to recharge battery automatically.
- ◆The controller is equipped with manual three-phase dump load switch. To using this switch, the wind turbine will carry out three-phase dump load forcibly.
- ◆The inside of the controller is equipped with surge arrester. Contain the over voltage into the wind turbine under the bearable voltage of the equipment or system. On the other way, to conduct the strong lightening current into the earth directly to avoid any damage of equipment.
- ※ Solar panel control system is optional. Based on customers' requirement.
- ※ Adopt Modbus Communication protocol. Convenient to carry out the secondary development.
- ※ Adjusting the technical specification via RS485 is available. Convenient to adjust the different wind turbines for professional customers.
- ※ Support WIFI and GPRS. Customers can monitor the real-time working state of the on grid wind power system via PC and mobile and query history

working sate.Both Android and OS are compatible in Mobile.

※ For the different wind turbine, the controller can be equipped with mechanical yawing, Rotate tail control, furred empennage, mechanical brake, hydraulic brake, electromagnetism brake and other brake functions.

## Product Show

	
	
Controller	

## Technical Parameters of the FKJ-B (PWM) Off - Grid Wind Solar Controller 1.5KW

Type	1.5KW-24Vdc	1.5KW-48Vdc
Wind turbine rated power	1.5KW	1.5KW
Wind turbine max. power	3KW	3KW
Solar panel power	300Wp	600Wp
Battery	24Vdc	48Vdc
Function	Rectifier, charge, control	
Display mode	LCD	
Display content	Wind turbine voltage, wind turbine current, wind turbine power, solar panel voltage, solar panel current, solar panel power, battery voltage, charge current	
PWM constant pressure voltage	>29Vdc	>58Vdc
3-phase load voltage of the wind turbine	30±1Vdc	60±1Vdc
Recovery charging voltage of the wind turbine	27±1Vdc	54±1Vdc
Solar controller stop charging voltage	29±1Vdc	58±1Vdc
Solar restore charge voltage	<29Vdc	<58Vdc
Low-voltage of the battery	20±1Vdc	40±1Vdc
Self-provided connecting wire of the battery	>8mm <sup>2</sup>	>6mm <sup>2</sup>
PWM fuse	63A	25A
Solar fuse	16A	10A
Charging fuse	63A	32A
Work environment temperature	-30-60°C	
Relative humidity	< 90% No condensation	
Noise (1m)	< 40dB	
Degree of protection	IP20 (Indoor)	
Cooling method	Forced air cooling	
*Communication interface (optional)	RS485/USB/GPRS/Ethernet	
*Temperature compensation (optional)	-4mv/°C/2V, -35°C~+80°C, Accuracy:±1°C	
Size of the controller (mm)	480*360*230	480*360*230
Weight of the controller	12Kg	11Kg
Size of the dump load (mm)	290*250*130	290*250*130
Weight of the dump load	4.5 Kg	4.5 Kg

**\*Above parameter only for reference**

**1. Could be custom made to user specifications. 2, Could have solar power control subject to user demand. 3. Size of the controller by blue meaning wall hanging case.**