

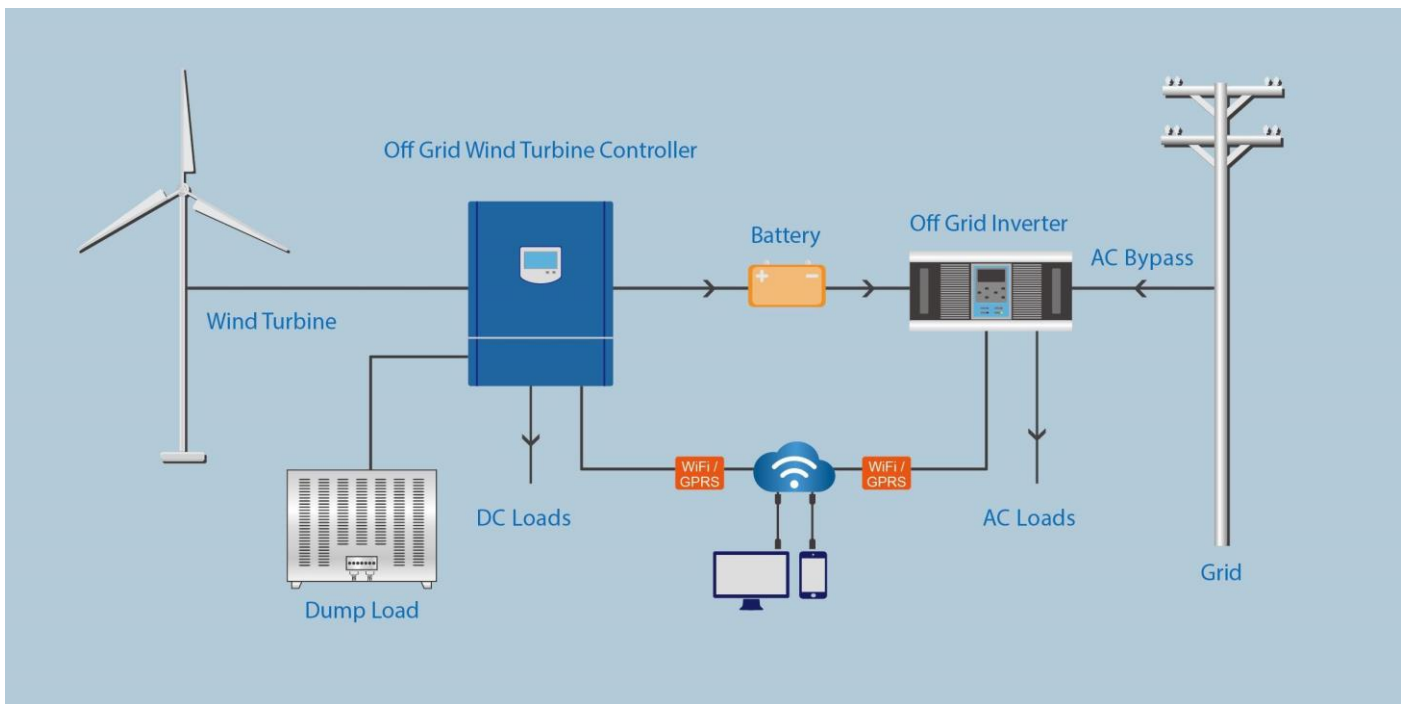
3000 WATT (3KW) WIND TURBINE CONTROLLER

For Battery Based and Off Grid Wind Systems



SPECIFICATIONS AND DATA

Model Number	3KW256V
Wind turbine rated power (W)	3KW
Wind turbine max power (W)	6KW
Battery Voltage	240 - 256VDC (for LiFeP04)
Operating mode	Continuous
Function	Rectifier, Charge, controller
Display mode	LCD
Display content	Wind turbine voltage, wind turbine current, wind turbine power, battery voltage, charge current
Operating environment	Temperature -30-60℃, humidity ≤80%
Relative humidity	<90% No condensation
Noise (1m)	<40dB
Degree of protection	IP20 (Indoor)
Cooling method	Forced air cooling
PWM dump load voltage (v)	298±1%Vdc
Dump load voltage of the wind turbine (v)	305±1%Vdc
Recovery charging voltage of the wind turbine (v)	288±1%Vdc
Self-provided connecting wire for Battery	>4mm ²
Self-provided connecting wire for dump load	>4mm ² / >6mm ² on controller
PWM fuse (A)	20A
Charging(A)	25A



PWM Wind Solar Hybrid Controller for Battery Based and Off Grid Systems

- ◆ The product is manufactured according to the JB/T6939.1-2004 industrial standard and GB/T 19115. Made in China.
- ◆ The images on the LCD display tell working state with various data shown in real-time such as: wind turbine voltage, current, power; solar panel voltage, current, power; battery group voltage and charge current. There is a small battery in the display in case of power failure, history data can be saved for 30 days.
- ◆ Two redundant sets of power control; The controller's constant voltage system and three-phase dump load system.
- ◆ The controller's constant voltage control is 120% of the rated power of the wind turbine. In case exceeding of The controller's capacity, the three-phase dump load will automatically start to immediately ensure safe running of the system.
- ◆ When strong or super-strong wind conditions occur, The controller's will ensure the battery is charged by the wind turbine with constant voltage and current. Always install protection breakers for the battery according to proper electrical design.

◆ **Battery Protection:** If the battery disconnects for any reason the three-phase dump load will start automatically to avoid the wind turbine idling and runaway accidents.

◆ Other battery protection features of the controller include: polarity reverse protection, disconnection, damage protection and Over-charging protection. When the battery is full (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 a manual three-phase dump load switch. To using this switch, the wind turbine will carry out three-phase dump load by choice, manually.

◆ The inside of the controller is equipped with surge arrester to prevent over voltage into the wind turbine under the unbearable voltage of the equipment or system. This will also help direct lightning current into the earth to avoid any damage of equipment.

OPTIONS

※ Solar panel control system is optional. Based on customers' requirement.

※ Diesel generator port is optional. Control the generator start and stop automatically

※ WIFI and GPRS Monitoring. Users can monitor the real-time working state of the system via PC and mobile app. Both Android and OS are compatible.

BRANDING AND SECONDARY DEVELOPMENT

※ Modbus and RS485 Communication available, requires secondary development.

※ The controller can be equipped for different brand and style wind turbines with mechanical yawing to have Rotate tail control, furlled empennage, mechanical brake, hydraulic brake, electromagnetism brake and other brake functions.

INSTALLATION EXAMPLES



DUMP LOAD (INCLUDED)

