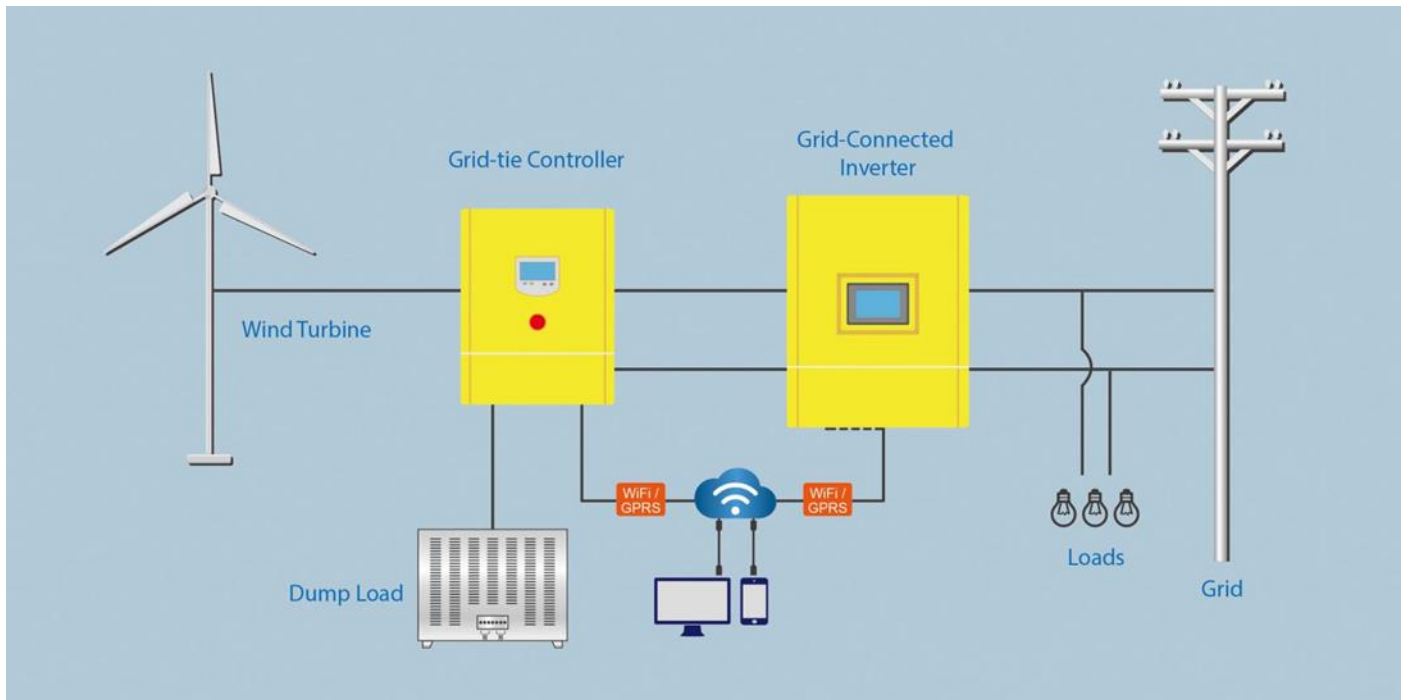


Functional Description



On grid Wind Turbine Controller

(Grid-tie) model Product Characteristics

- ◆ The product is manufactured according to 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. Various data show: real-time wind turbine voltage, current, solar panel voltage, current, DC output voltage, current, total power generation (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 of exceeding PWM's capacity, the three-phase dump load will automatically start immediately. After 10-20 minutes, the three-phase dump load will stop and the wind turbine will re-start to resume power supply to ensure the safe running of the overall wind turbine generation system.
- ◆ When the strong or super-strong wind conditions, the controller can conduct constant voltage output to ensure the inverter safety running.
- ◆ When the condition of disconnected grid-connected inverter, the controller can conduct constant voltage output and wait for inverter resumption.
- ◆ When the grid is cut off, the three-phase dump load of the controller will automatically start to work and the inverter will stop output to grid. When the grid resumes, the controller stops three-phase dump load and the inverter will resume power supply.
- ◆ The inside of the controller is equipped with a surge protector. It contains the over-voltage into the wind turbine under the bearable voltage of the equipment or system. On another way, to conduct the strong lightning current into the earth directly to avoid any damage of equipment.

- ◆ The controller is equipped with emergency stop switch; in case of emergency, press down the emergency stop button in the front panel to cut off all power supply of the controller and the wind turbine will immediately brake (three-phase dump load) .
- ◆ The controller is equipped with manual three-phase dump load switch. To using this switch, the wind turbine will brake (three-phase dump load).
- ※ 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.
- ※ Can increase the solar panel control system according to customer requirements.
- ※ For the different wind turbine, the controller can be equipped with mechanical yawing, rotate tail control, furlled empennage, mechanical brake, hydraulic brake, electromagnetism brake and other brake functions.

Product Photo



CONTROLLER



Dump load

Technical Parameters of the On Grid Wind Turbine Controller 5KW

Type	5KW
Wind turbine rated power	5KW
Wind turbine Max. power	6KW
Wind turbine rated voltage	AC220V
Function	Rectifier,control, DC output
Automatic protection function	Over voltage protection, network electric cut off protection, regulated supply output, arrester
Manual function	Manual brake, reset, emergency switch
Display mode	LCD
Display content	Wind turbine voltage, current, power; Solar voltage, current, power; DC output voltage, DC output current, DC output power, total power.
PWM constant voltage	≥330dc
wind turbine 3-phase dump load voltage	350±5Vdc
Time-lapse of the wind turbine 3-phase dump load	12-20 min
PWM dump load fuse	10A
Fuse of DC output	16A
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/WIFI/Ethernet
Size of the controller (mm)	560*430*320
Weight of the controller	18Kg
Size of the dump load (mm)	500*460*330
Weight of the dump load	10Kg

*Above parameter only for reference

1. Could be custom made to user specifications.
- 2, Could have solar power control subject to user demand.

Project case

