

Horizontal Wind Turbine Catalogue

Model: GH-3KW Horizontal axis wind turbine On-grid|Off-grid system

Overview

GREEF GH-3KW wind generator is the conversion of wind energy into mechanical energy first and electric energy afterwards. This equipment can fully make use of wind power to recharge a battery, and also can saved energy into ac source alternating current. Without the necessity of fuel, the GH-3KW wind generator is pollution free and far away from noise. The GH-3KW wind generator is generally applicable to the area which has good condition but is far away from the power grid, or the power grid is not normal. The GH-3KW generator can supply lighting, the television set, the searchlight, the communication equipment, the power tool and other household appliances.



Recommended for:

- Household,Garden,farm,Urban ,Rooftop
- Telecommute sites.
- Rural electrification programs. Island , sentry, island, sight lighting

Technical specification

Model	GH-3KW
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Performance

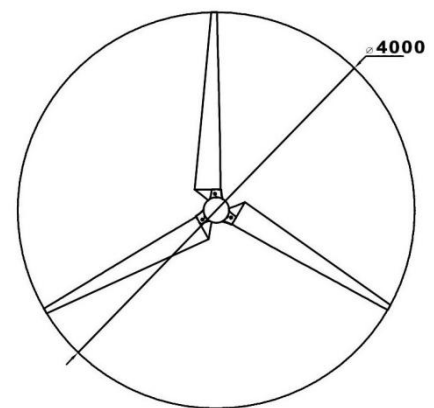
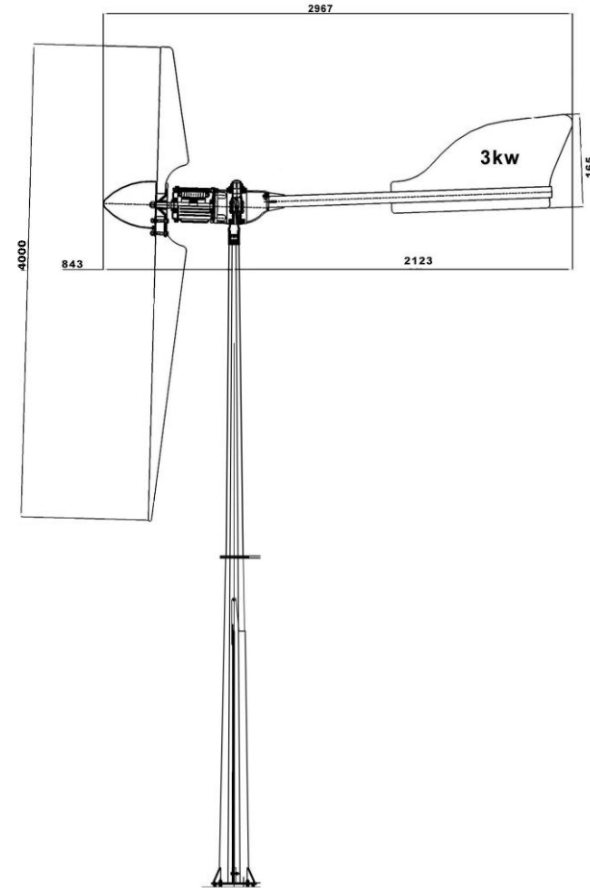
Rated Power	3000W
Start Wind Speed	3m/s(6.72mph)
Rated Wind Speed	10m/s(22.4mph)
Working Wind Speed	4-25m/s (8.96-56 mph)
Safety Wind Speed	50m/s(112mph)

Physical Parameters

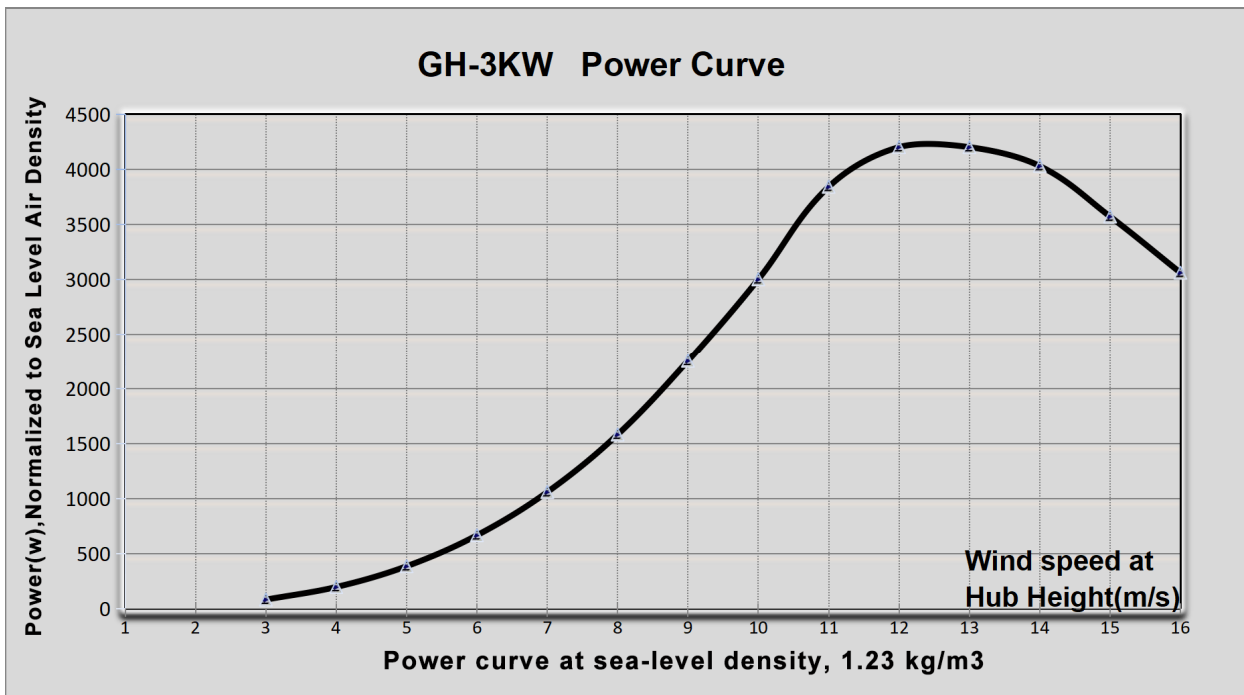
Blades Length	1.9M(6.23ft)
Blades Rotor Diameter	4M(13.12ft)
Blades Material &Quantity	FRP /3PCS
Top Weight	150kg
Swept Area	8.04 m²
Tower Height	8m(26.24ft.) Free folding tower

Generator Parameters

Generator Type	Permanent Magnet Generator	
Rated Speed	350RPM	
Start Torque	2.5N.M	
Option Voltage	48-240VAC	
Protection Method	Electromagnetic +PWM	Brake
Protection Grade	IP54	
Working Temperature	-40-50℃	
Life time	20 Years	



Power Curve



Annual Energy Production

Model	Annual Wind Speed (m/s)	3	4	5	6	7
GH-3KW	Production (kWH)	658	1559	3045	5262	8355

This data will have $\pm 10\%$ difference according to real condition.

Sound Data

Test position: At 15m away from generator (average value of 3 point-rears, left, right.)

Wind Speed (m/s)	3	4	5	6	7	8	9	10	11
Sound(dB)	19.2	21.5	26.8	29.3	31.3	34.9	39.9	40.9	44.9
Wind Speed (m/s)	12	13	14	15	16	17	18	19	20
Sound(dB)	45.9	47.8	50.8	53.9	57.6	59.5	62.9	66.2	68.2

Note: The sound value includes wind noise.



Accesses Details Pictures

Generator

Aluminum Alloy shell



Light & antirust

Copper wires



Long lifetime Good performance in high temperature

Magnetic steel



NdFeB permanent Magnet

Blades



FRP longlife time

Nose Cone



FRP longlife time

Hub Plate



Iron steel Electrostatic spraying

Tail



Electrostatic spraying





Bolts



Stainless steel

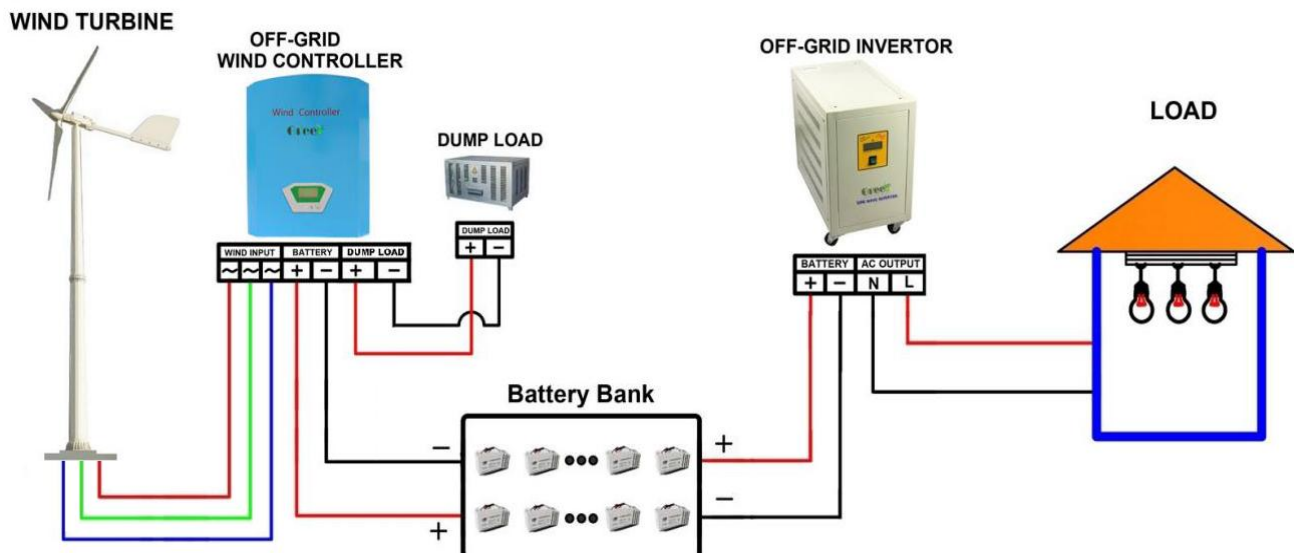


Optional Tower Type

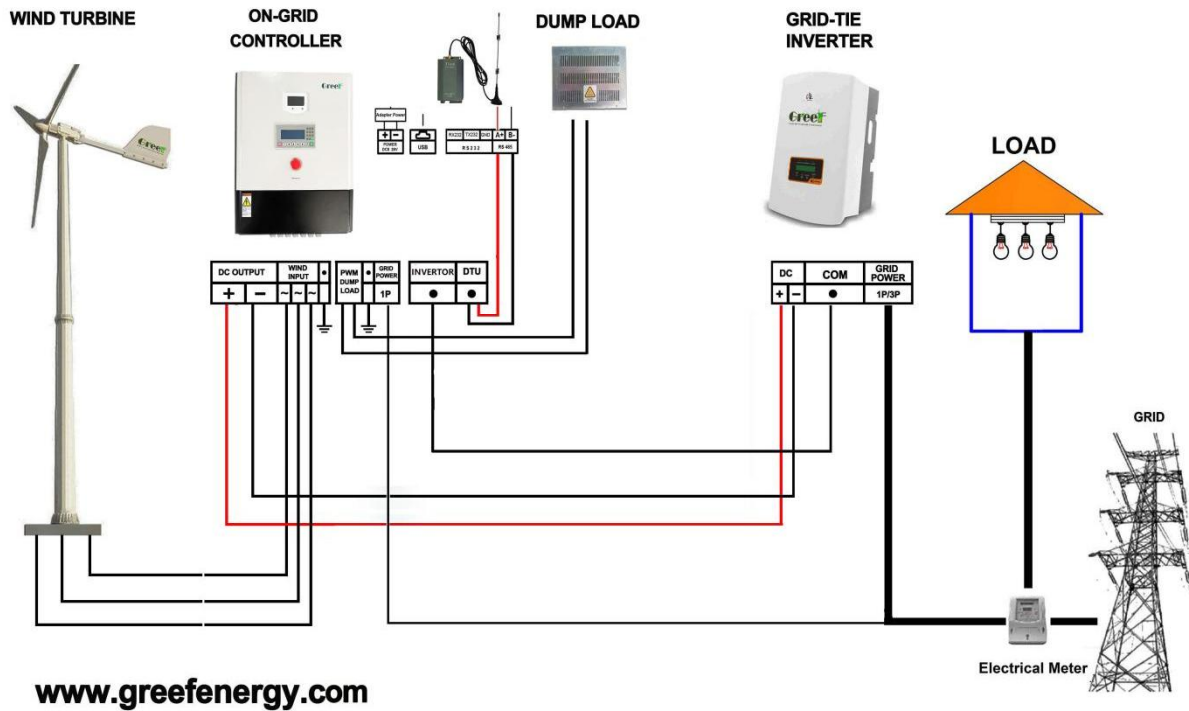
 <p>Free Stand Tower</p>	 <p>Free Folding Tower</p>	 <p>Hydraulic Tower</p>	 <p>Guy Wire Tower</p>
<p>Cost : Middle Package size:Middle Installation need crane, Small floor space</p>	<p>Cost :Second high Package size:Small Installation very easy no need crane, need small area</p>	<p>Cost : Highest Package size:Bigger Installation easy no need crane, need small area</p>	<p>Cost : Lowest Package size:Smallest Installation need biggest area</p>

System solution Diagram

OFF-GRID WIND POWER GENERATOR SYSTEM



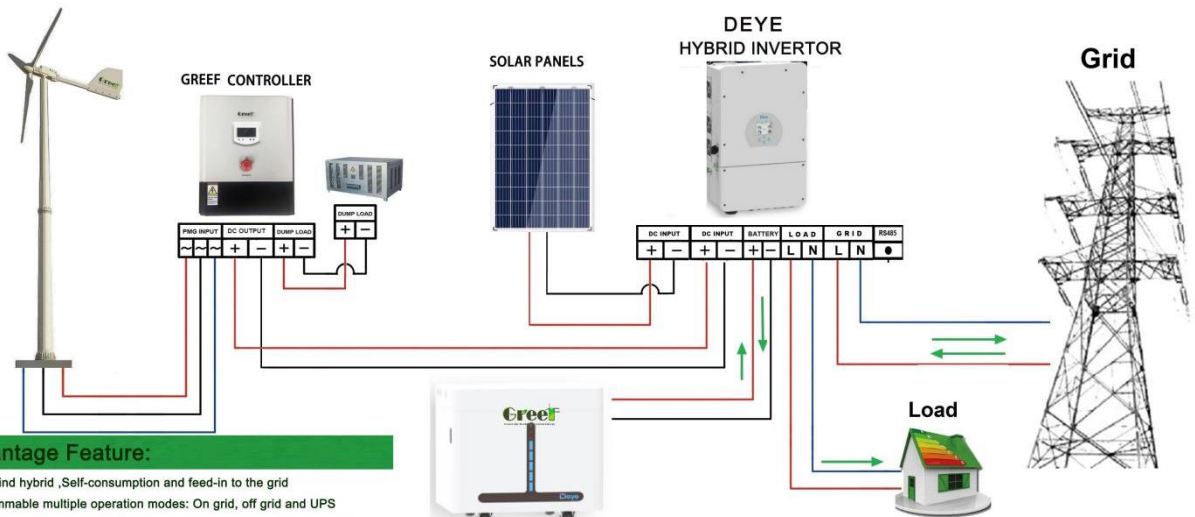
Greef GREEF GRID TIED SYSTEM WIRING DIAGRAM



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HYBRID SYSTEM SOLUTION

GREEF WIND TURBINE



Advantage Feature:

- ◆ Solar wind hybrid ,Self-consumption and feed-in to the grid
- ◆ Programmable multiple operation modes: On grid, off grid and UPS
- ◆ Configurable AC/Solar/Wind Generator Charger priority by LCD setting
- ◆ Compatible with Grid or generator power
- ◆ With limit function, prevent excess power overflow to the grid
- ◆ Smart settable three stages MPPT charging for optimized battery performance
- ◆ Time of use & Smart Load function

GREEF NEW ENERGY

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