

# Horizontal Wind Turbine Catalogue

Model: GH-10KW      Horizontal axis wind turbine      On-grid | Off-grid system

## Overview

GREEF GH-10KW 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-10KW wind generator is pollution free and far away from noise. The GH-10KW 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-10KW generator can supply lighting, the television set, the searchlight, the communication equipment, the power tool and other household appliances.



## Horizontal Wind Turbine

- Low Noise<40db
- 3 Ways Protection of strong wind
- 25 years lifetime
- 3 years guatantee time

## Recommended for:

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

## Technical specification

Model	GH-10KW
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### Performance

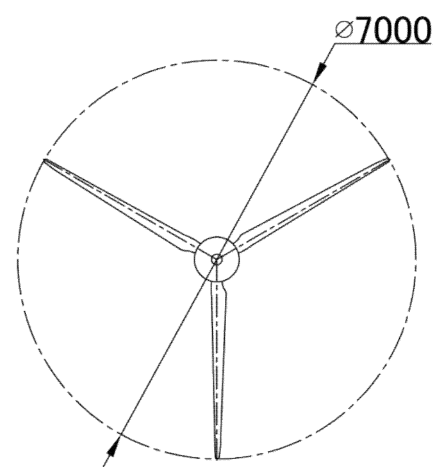
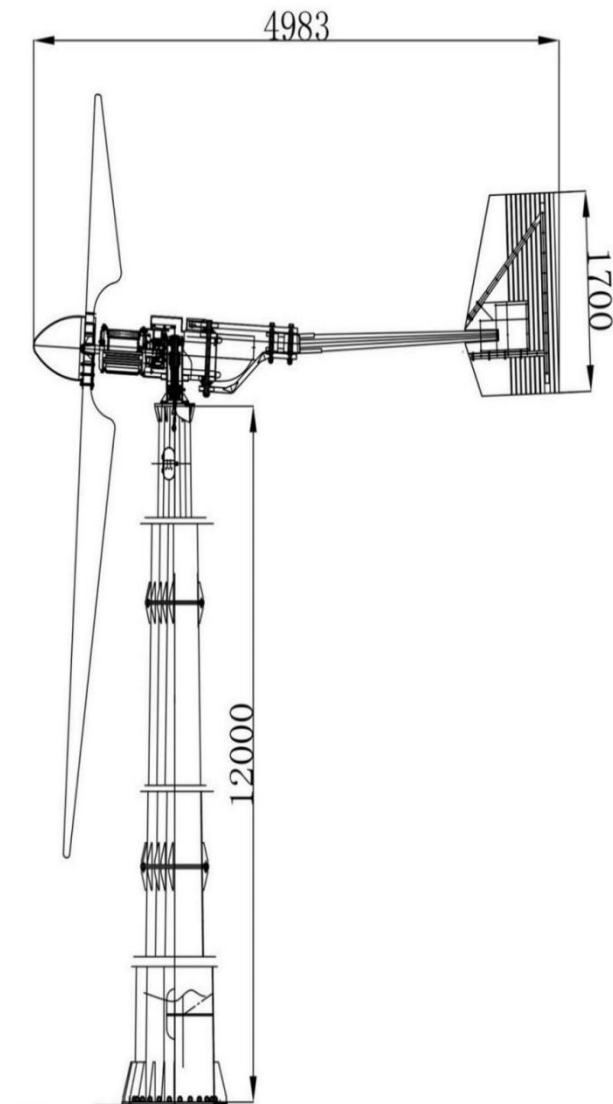
Rated Power	10000W
Start Wind Speed	3m/s(6.72mph)
Rated Wind Speed	10m/s(22.4mph)
Working Wind Speed	4-25m/s (6.72-56 mph)
Safety Wind Speed	50m/s(112mph)

### Physical Parameters

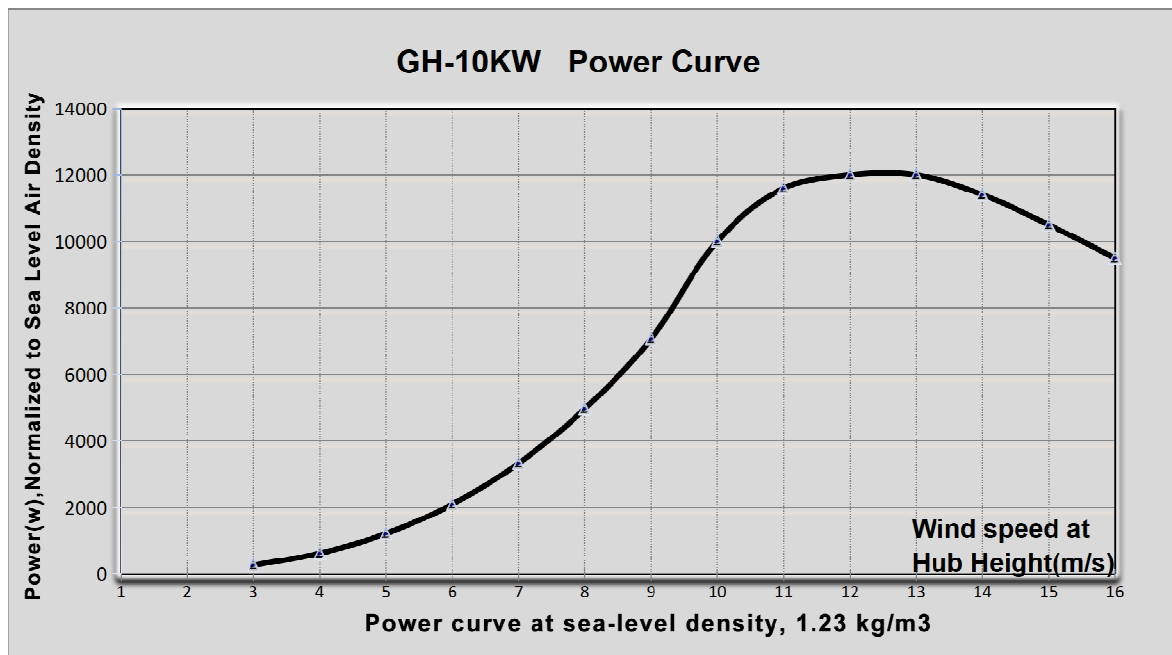
Blades Length	3.8M(12.46ft)
Blades Rotor Diameter	7M(22.97ft)
Blades Material &Quantity	FRP /3PCS
Top Weight	650kg
Swept Area	38.47 m <sup>2</sup>
Tower Height	12m(39.36ft.) Free stand tower

### Generator Parameters

Generator Type	Permanent Magnet Generator
Rated Speed	250RPM
Start Torque	7.5 N.M
Option Voltage	120-500VAC
Protection Method	Electromagnetic Brake +PWM
Protection Grade	IP54
Working Temperature	-40-50°C
Life time	20 Years



## Power Curve



## Annual Energy Production

Model	Annual Wind Speed (m/s)	3	4	5	6	7
GH-10KW	Production (kWH)	2065	4894	9558	16517	26228

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

## Sound Data

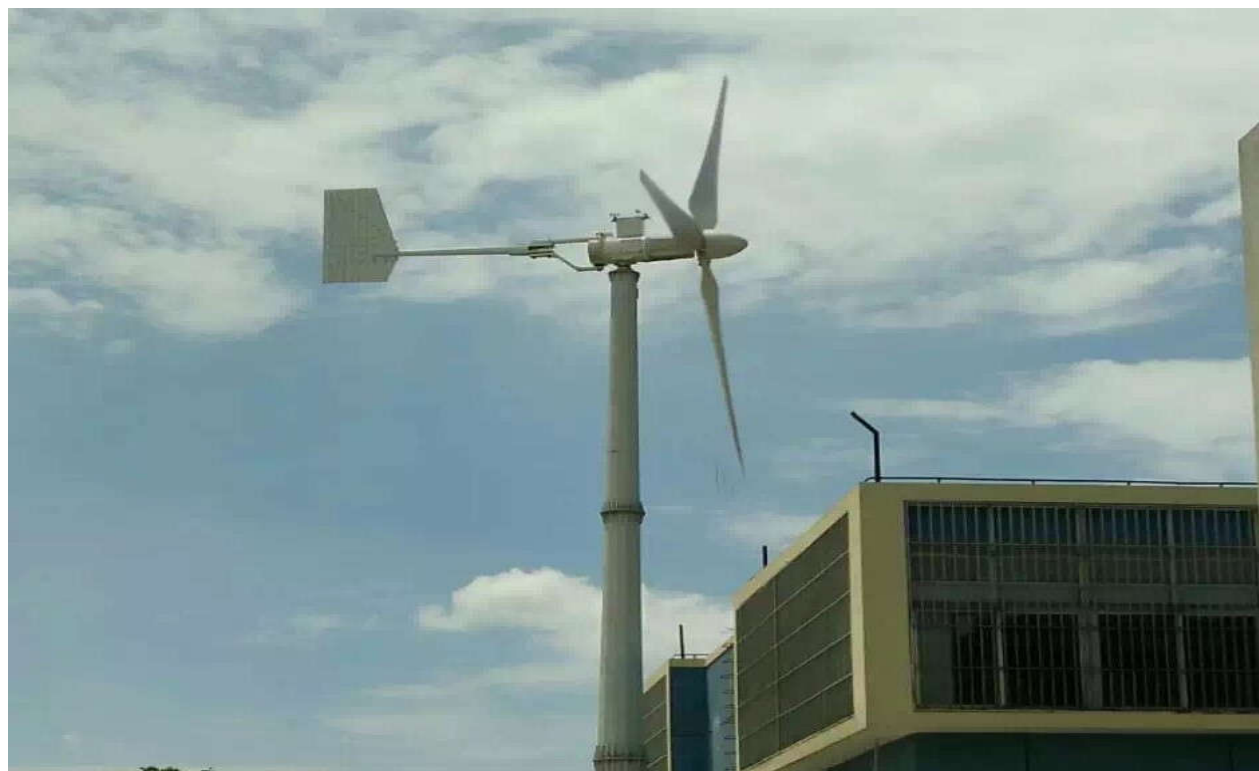
Test position: At 15m away from generator (average value of 3 point-rears, left, right.)

Wind Speed (m/s)	3	4	5	6	7	8	9	10	11
Sound( dB )	21.6	24.7	30.2	32.5	33.5	36.7	42.6	43.6	47.1
Wind Speed (m/s)	12	13	14	15	16	17	18	19	20
Sound( dB )	48.3	50.3	54.6	57.8	59.7	63.5	65.5	68.9	70.2

Note: The sound value includes wind noise.

## Pictures

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## Accesses Details Pictures

**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 rob**



Electrostatic spraying

**Tail Vane**



Electrostatic spraying





**Bolts**



Stainless steel

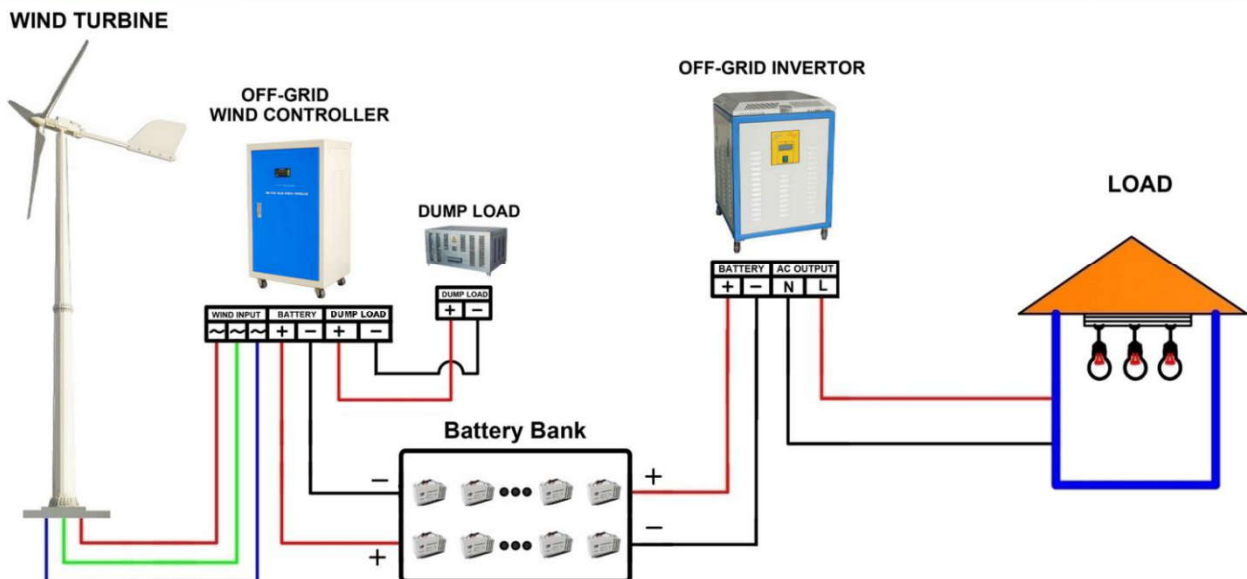


## Optional Tower Type

 <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>

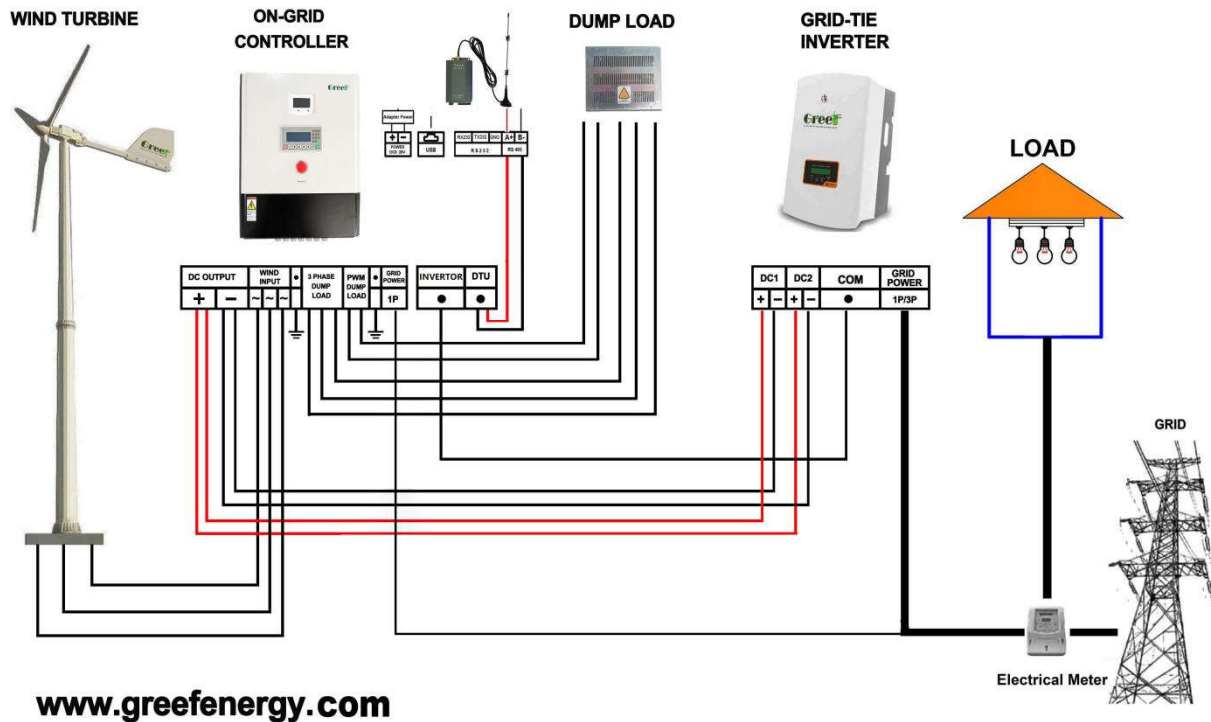
## System Solution Diagram

### OFF-GRID WIND POWER GENERATOR SYSTEM





## GREEF GRID TIED SYSTEM WIRING DIAGRAM

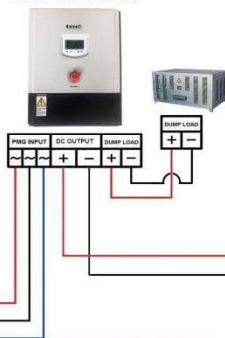


## HYBRID SYSTEM SOLUTION

GREEF WIND TURBINE



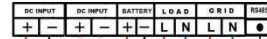
GREEF CONTROLLER



SOLAR PANELS



DEYE HYBRID INVERTOR



Grid



Load



48V BATTERY BANK

### 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**

[www.greefenergy.com](http://www.greefenergy.com)

## Why Choose GREEF ?

★Bureau, SGS, TUV, Intertek verified Gold Plus Supplier

★Top 3 suppliers of generators products with all 5 star feedback on alibaba.com

★13 years'experience engineer&QC team

★7days\*24hours on time service.

★3 years guarantee service, focus on after-sale service

★One stop customized system solution

★Trade experience with more than 60 countries

★CE, RoHS certificated

★OEM, ODEM are accepted

★Support safe payment through Alibaba trade assurance

★Products quality and on time delivery are guaranteed by alibaba.com



**Verified Supplier**



**Mr Victor Chen**

**Sales Manager**

Mob:+86-19861465398

E-mail:info@greefenergy.com

**QINGDAO GREEF NEW ENERGY EQUIPMENT CO.,LTD**

Add:No.6 ChangchengnanRoad,Chengyang,Qingdao,China

Tel:0086-532-67731422-802 FAX:0086-532-67731422-808