



Power the World with Green Energy

VERTICAL AXIS WIND TURBINE

Products Brochure

Model: GV-1KW

Version2021.01



150
rpm

Low rated speed

2.8
m/s

Low start wind speed

< 30db

Low noise

CE

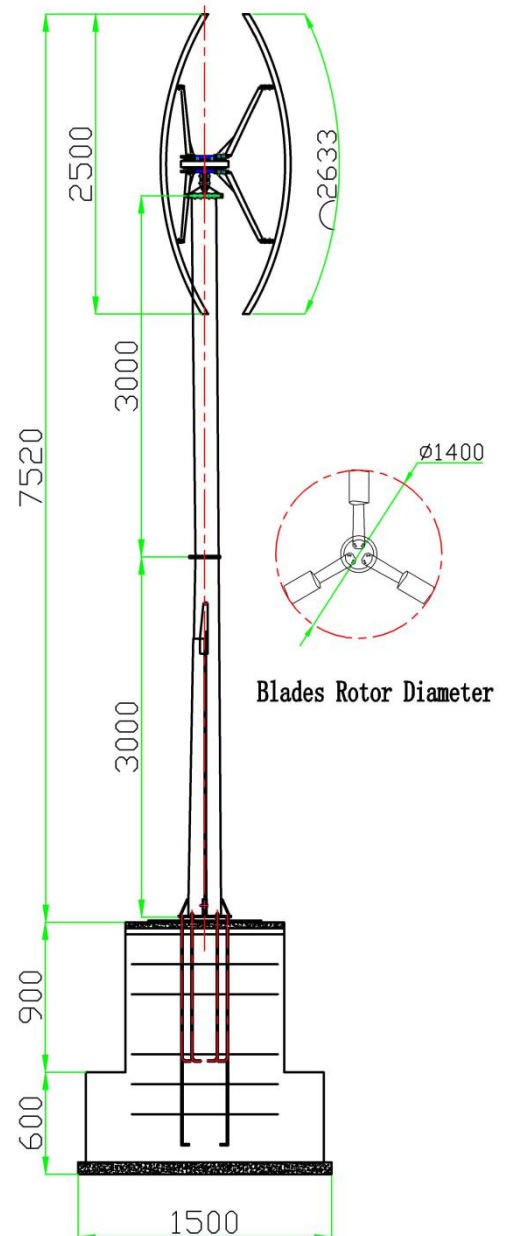
IEC61400-2
IEC61400-12

3
years

Products warranty

Technical specification

Model	GV-1KW
Performance	
Rated Power	1kW
Max Power	1.5kW
Start Wind Speed	2.8m/s (6.27mph)
Rated Wind Speed	11m/s(24.64mph)
Working Wind Speed	3-25m/s (6.72-56 mph)
Safety Wind Speed	50m/s(112mph)
Physical Parameters	
Blades Length	2.65M(8.69ft)
Blades Rotor Diameter	1.4M(4.6ft)
Blades Material &Quantity	FRP /3PCS
Mill Weight	175kg
Swept Area	3.71 m ²
Tower Height	6m(19.68ft.)
Generator Parameters	
Generator Type	Axial Flux Coreless outer rotor disc permanent magnet direct drive generator
Rated Speed	150RPM
Start Torque	<0.3N.M
Option Voltage	24-220V
Protection Method	Electromagnetic Brake +PWM
Protection Grade	IP54
Working Temperature	-40-50°C
Life time	20 Years



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)	1.31	3.02	6.20	9.43	13.42	22.08	32.54	36.45	37.22
Wind Speed (m/s)	12	13	14	15	16	17	18	19	20
Sound(dB)	45.11	45.20	45.25	45.33	45.44	45.52	45.62	45.85	46.00

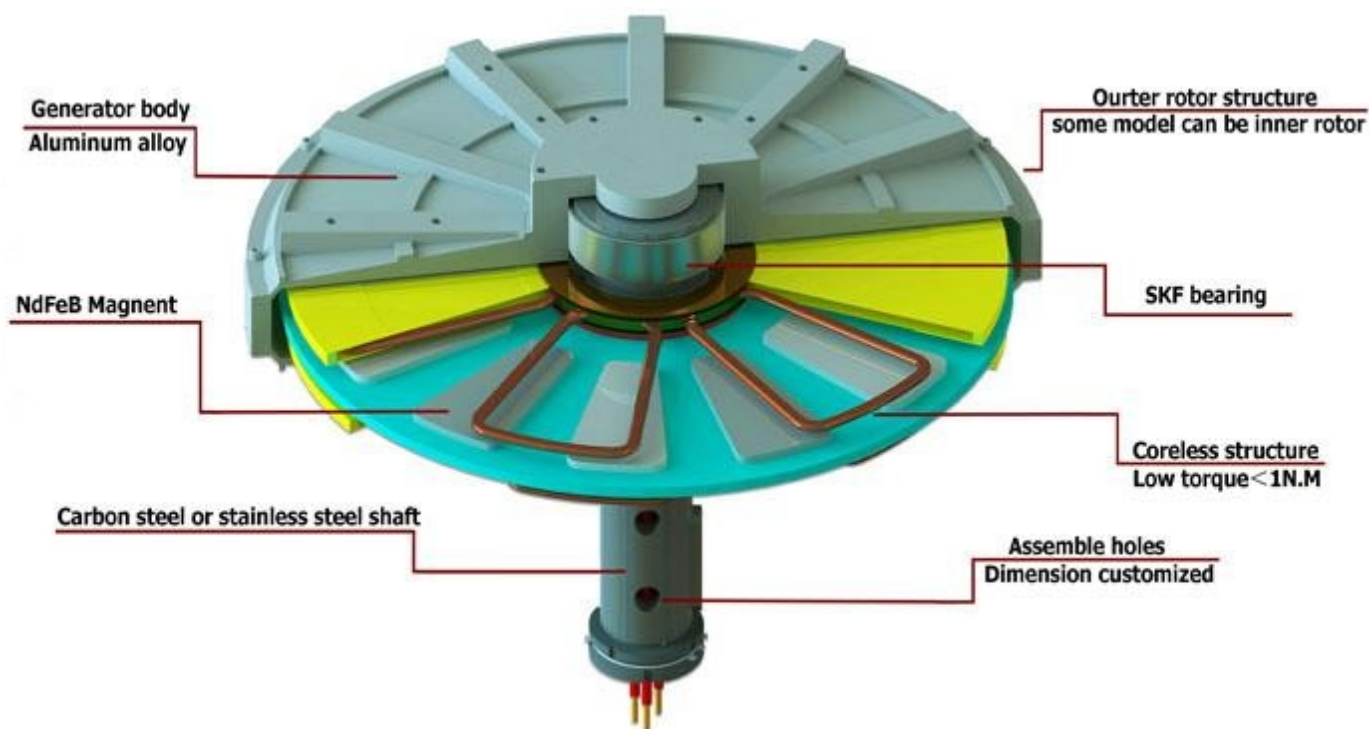
Note: The sound value includes wind noise.

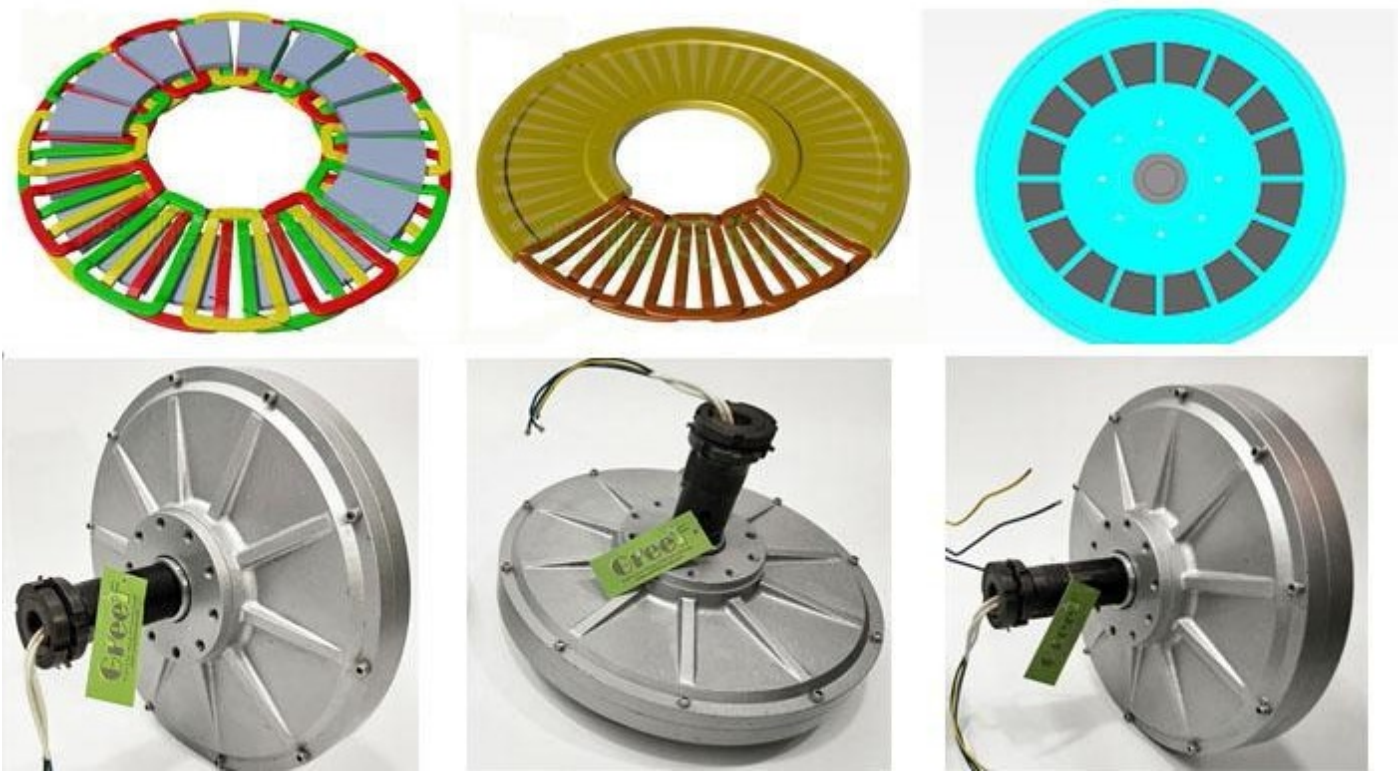
Why choose GV-1KW wind turbine?

● Especial Generator ---- coreless disc generator

Advantage:

1. Torque Patent Technology: use newest "Precise Coil" technology.
2. No hysteresis and gear notches effect make the start torque very low $<1\text{N.M}$,it can make the wind turbine have **low start wind speed**.
3. Original Structure: use disc coreless motor to take place traditional motor makes it less drag
4. Higher Reliability: special structure make it bigger ratio of power to volume, power to weight and have long life of 8 times longer than traditional motor.

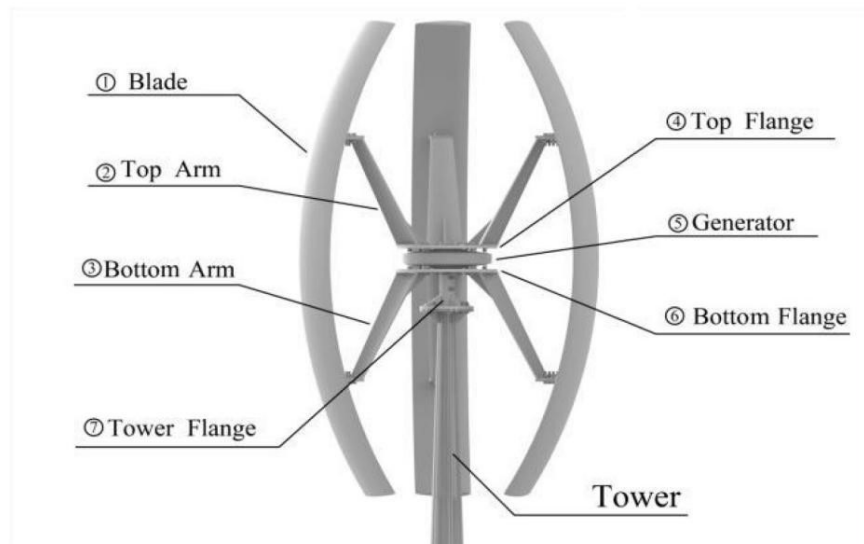











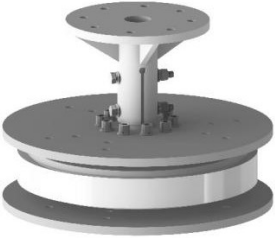
Why choose GV-1KW wind turbine ?

- Simple structure ,1hour installation

1.Parts Name:



2.Product packing list:

No.	Name	Components pictures	Quantity	Packing method
1	Blades	① 	3	Packed in one box
2	Support Arms (Top/Bottom)	②  ③	6	Packed in one box
	Carton (Bolt,Screw etc)		1	
3	Top Flange	④ 	1	Packed in one box
	AC Generator	⑤ 		
	Bottom Flange	⑥ 		
	Tower Flange	⑦ 		
		 Delivery as a whole		

Why choose GV-1KW wind turbine?

● Power Curve Tracking Function

- For off-grid system –Marching MPPT Charge controller
- For on-grid system –Marching MPPT Wind Invertor
- Wind turbine MPPT track point adjustable by yourself
- Off-grid system wind turbine low cut in wind speed charge
- Complete protection function
- Several functions are optional, such as PV control function, wind speed measure function, rotational speed control function and temperature compensation function.
 - RS232/RS485/RJ45/GPRS/WIFI/Bluetooth/Zigbee optional. (It can be monitored by app for those with GPRS/WIFI/Bluetooth/RJ45 connection)



MPPT Charge Controller with dump load
(off-grid)



Pure sine wave Invertor
(off-grid)



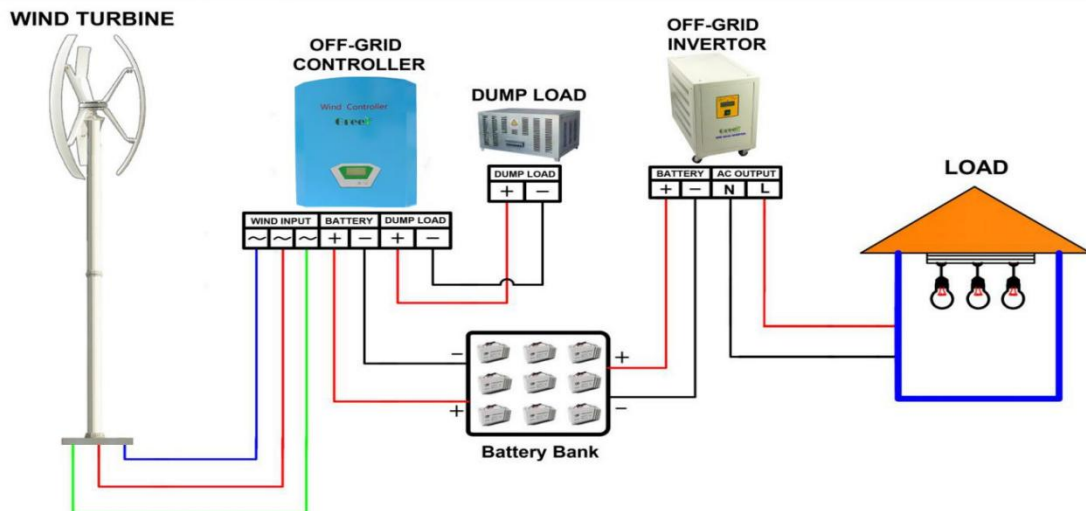
On-grid Controller
(On-grid)



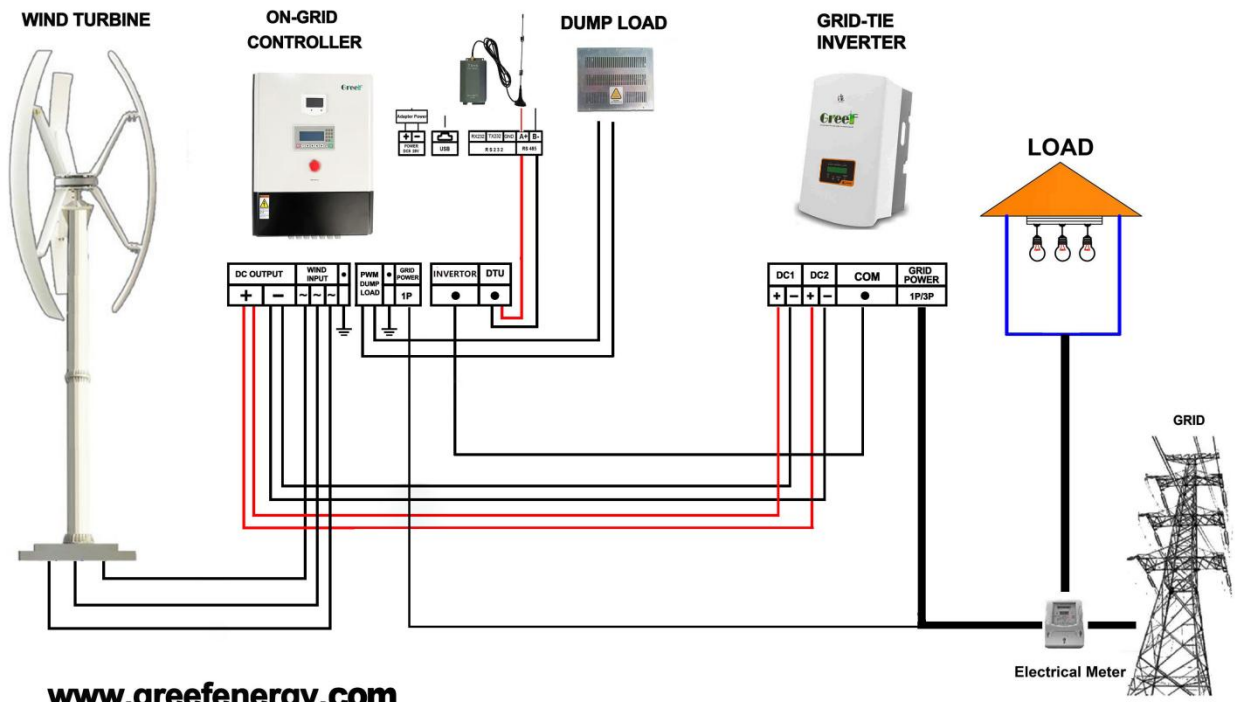
On-grid Invertor
(On-grid)

SYSTEM SOLUTION

Greef OFF-GRID WIND POWER GENERATOR SYSTEM

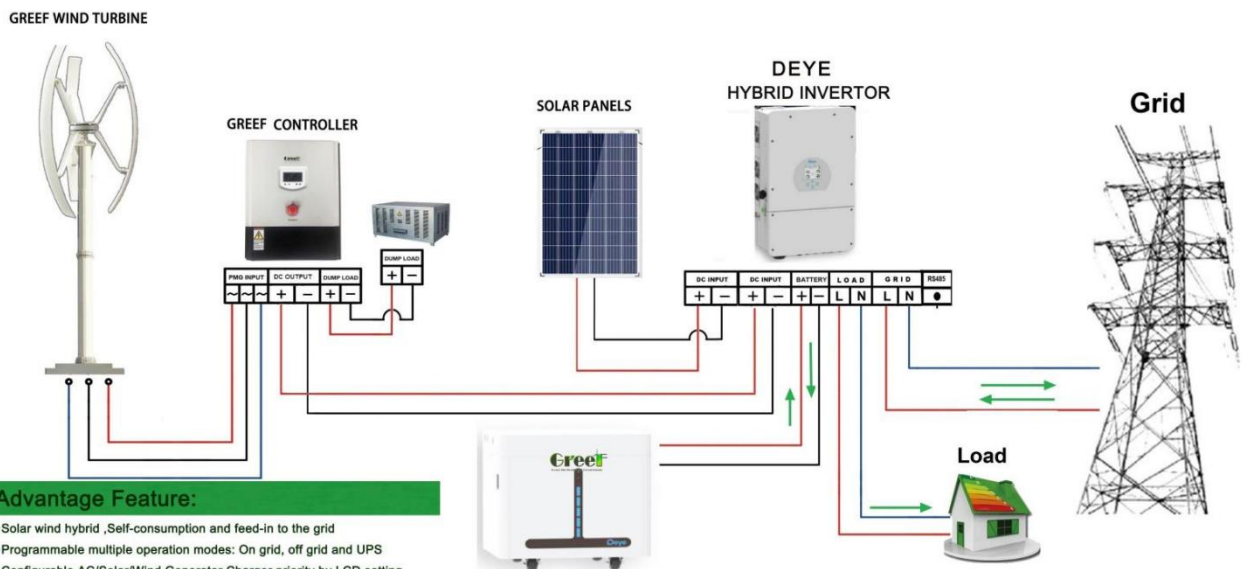


Greef Greef GRID TIED SYSTEM WIRING DIAGRAM



www.greefenergy.com

Greef HYBRID SYSTEM SOLUTION



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

+ 8615166057722

0086-532-67731422

service@greefenergy.com

www.greefenergy.cn

No.6 Changcheng South Road, Chengyang District, Qingdao City, Shandong Province, China

Project Show





QINGDAO GREEF NEW ENERGY EQUIPMENT CO.,LTD

2-111 No.6 Changcheng Nan Road,Chengyang district, Qingdao China

Ph. +86 0532 67731422-801 • Fax +86 0532 67731422-808

E-mail: sales@greefenergy.com

www.greefenergy.com

<https://greefenergy.en.alibaba.com/>

<https://greefnewenergy.en.alibaba.com/>

