

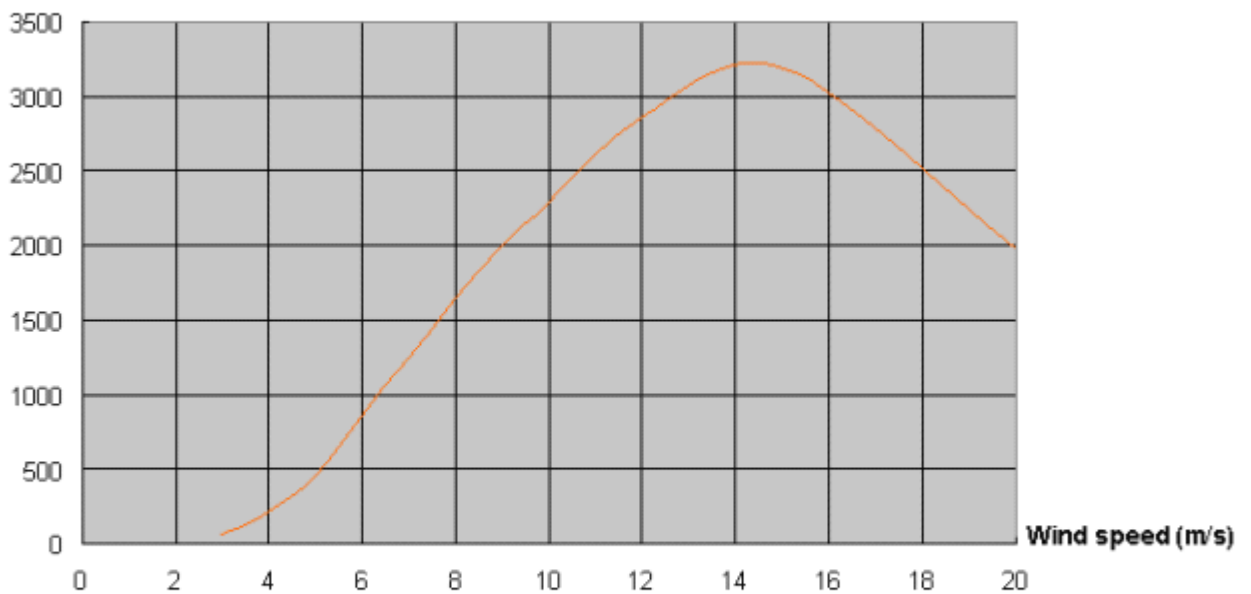
Model H3.8—2000 W (Edited on Aug. 23rd, 2011)

## 1. Panorama Pictures



## 2. Curve

Power (W)



**HUMMER-2KW Wind Generator**

### 3. Specifications

Rated power (W)	2000
Maximum output power (W)	3200
Battery bank voltage (Vdc)	120
System output voltage (Vac)	110/220
Start-up wind speed (m/s)	3
Rated wind speed (m/s)	9
Working wind speed (m/s)	3-25
Survival wind speed (m/s)	50
Generator efficiency	>0.8
Wind energy utilizing ratio (Cp)	0.45
Generator type	Permanent Magnet Alternator
Generator weight (kg)	25
Blade material/quantity	GRP/3
Blade diameter (m)	Φ3.8
Speed regulation method	Yawing+Electromagnetism braking
Shutting down method	Manual+Automatic

### 4. Structural Pictures and Description

**Generator body:** mainly including generator, nose cone, and protection cover

Hummer generator, the most advanced in the world, wins 4 proprietary intellectual property rights. It is made of high-efficiency magnetic materials, special copper alloy, high-strength stainless steel and aeronautic aluminum alloys. It is extremely light and small but with high generating efficiency.



#### **Nose cone**

Made of reinforced aluminum alloy, it locates in front of blades to reduce the wind resistance. The generator is enclosed in the nose cone, which is favorable for heat dispersion.

#### **Protection cover**

Made of reinforced aluminum alloy, it locates between blades and nose cone to further reduce the wind resistance and protect the generator.



### SKF Bearings

Two SKF bearings, famous in the world with good quality and a long history, make sure the system in reliable, safe and steady operation status.



### Flange

Made of fine steel parts, it is used to fix the blades.



### Blades

Made of glass reinforced plastic, they receive wind energy and convert it into mechanical energy. Every 3 blades compose one set and pass strict balance test before delivery, so please don't disorderly use.



### Yaw shaft

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Made of fine steel parts, it is used to connect generator, blades, tail pole, tail wing with tower together. With the slip ring, it can rotate at 360°.

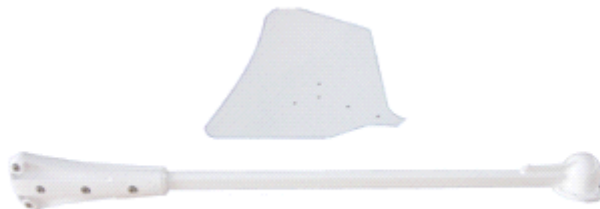


### **Tail pole & Tail wing**

Tail pole is light with high intensity and made of manganese steel.

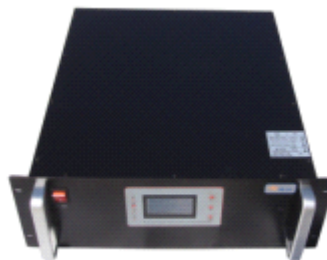
Tail wing is made of stainless steel, inflexible, auto-deflection in high wind condition, reliable and sharp in speed limitation.

They are used in 2kw and below models.



### **Off grid inverter**

Adopting SPWM technology, it will inverter with high converting efficiency, output stable frequency and stable voltage, filter out noise. It is used in the off grid system and power the electric loads.



### **Grid tied inverter**

Adopting MPPT and IGBT technologies, It inverts with high power generating capacity and wide AC voltage range. It connect with state grid and the energy storing device isn't needed.



### **Rectifier/ dumping controller**

It rectifies AC current generated by wind generator into DC current and charge the battery bank. It also controls the dumping load.



### **Dumping load**

With metal dumping box, it quickly dissipates heat by air convection. A fan isn't needed.

