



## ***Aeolos-H 10KW***



*Aeolos wind turbine  
SINCE 1986*



**Aeolos-H 10KW**  
windturbinestar.com



### Turbine

Rated power 10 kW  
 Max Power 13 kW  
 Start up wind speed 2.5 m/s (5.6 mph)  
 Rated Wind speed 10 m/s (22.3 mph)  
 Survival wind speed 50 m/s (111.8 mph)  
 Design lifetime 20 years  
 Overall weight 520 kg (1146.4 lbs)

### Rotor

Rotor diameter 8.0 m (26.2 ft)  
 swept area 50.2 m<sup>2</sup> (538.9 ft<sup>2</sup>)  
 Rotor speed 180 rpm  
 Blade material Glass Fiber

### Generator

Drive Type Direct Drive (Without Gearbox )  
 Generator Type Three Phase PMG  
 Generator Voltage 300 VDC (Grid-off)  
 450 VDC (Grid-on)  
 Efficiency 95%

### Controller

Control System PLC with Touch Screen  
 Remote Monitoring Optional

### Safety

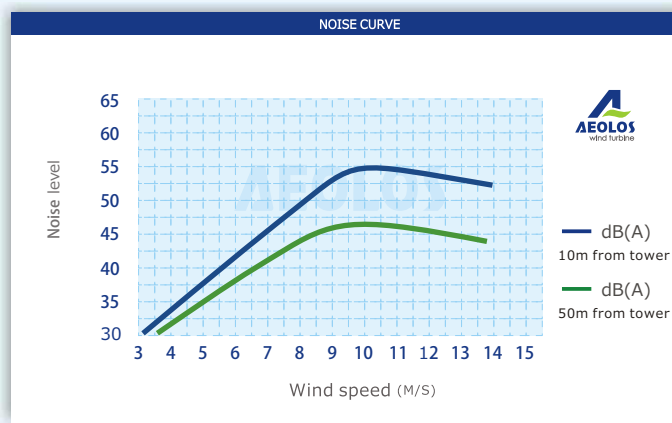
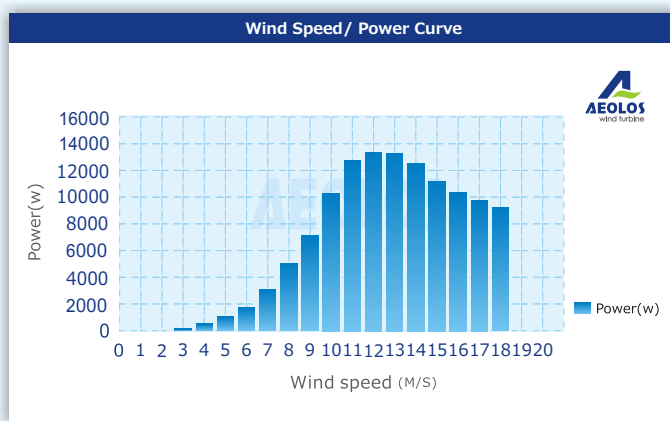
Main Brake System Yaw Control & Electronic Brake  
 Secondary Brake System Mechanical Hydraulic Brake  
 Back-up Power 24V UPS

### Tower

Monopole Tower 12m 18m 24m 30m  
 Hydraulic Tower 12m 18m 24m

### Warranty

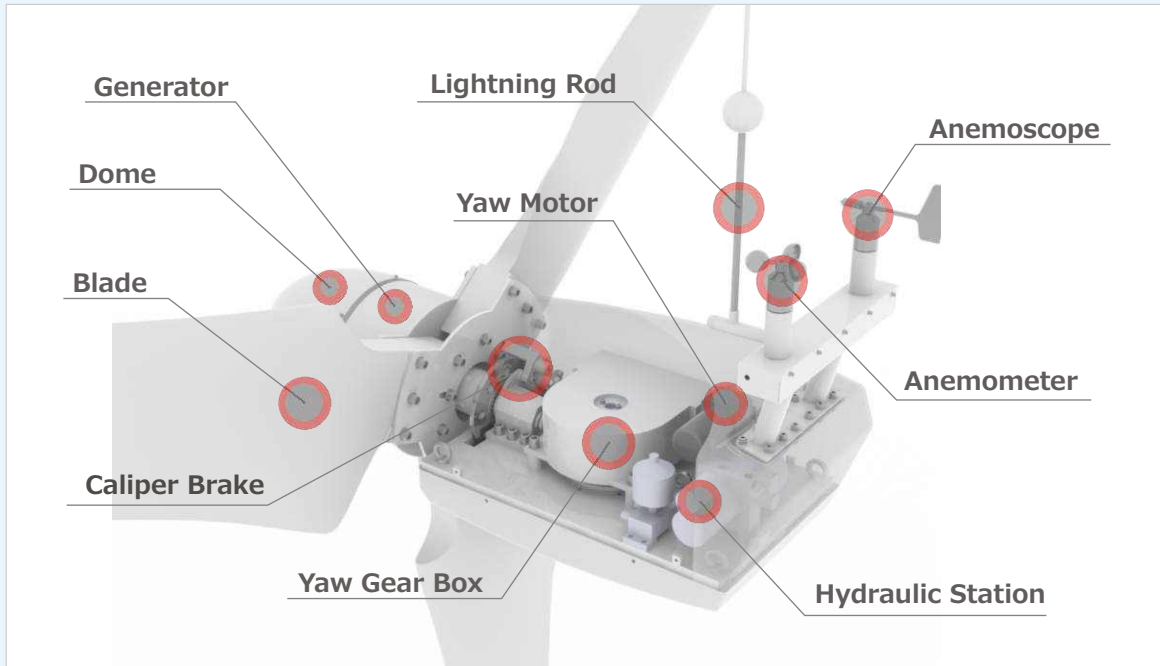
Standard warranty 5 years



Aeolos-H 10kW Wind Turbine Output								
Wind Speed(m/s)	3	4	5	6	7	8	9	10
Generator Power(w)	198	485	1020	1850	3098	4852	7320	10080
Annual Energy Output(kwh)	3469	7647	15190	25930	40708	59505	83360	105961

5 YEAR WARRANTY





## Why Choose AEOLOS-H 10kW Wind Turbine?

### Triple safety protections

Aeolos-H 10kW use the same design with Mega Watt wind turbine. Its cost is much higher than traditional 10kW wind turbine with tail but it is more safety and reliable. Aeolos-H 10kW provided yaw control, PWM electronic brake and hydraulic brake triple protections.



+



PWM Electronic Brake



Auto Hydraulic Brake



24V UPS



## Protections For:

- Over Wind speed
- Over DC voltage
- Over DC current
- Over temperature
- Over RPM
- Emergency Stop
- Power lose/ Grid failure
- All other faults

5 YEAR WARRANTY





**More power output**

$$\text{Power} = 0.5 \times \rho \times v^3 \times S \times \eta \times C_p$$

V= Wind Speed

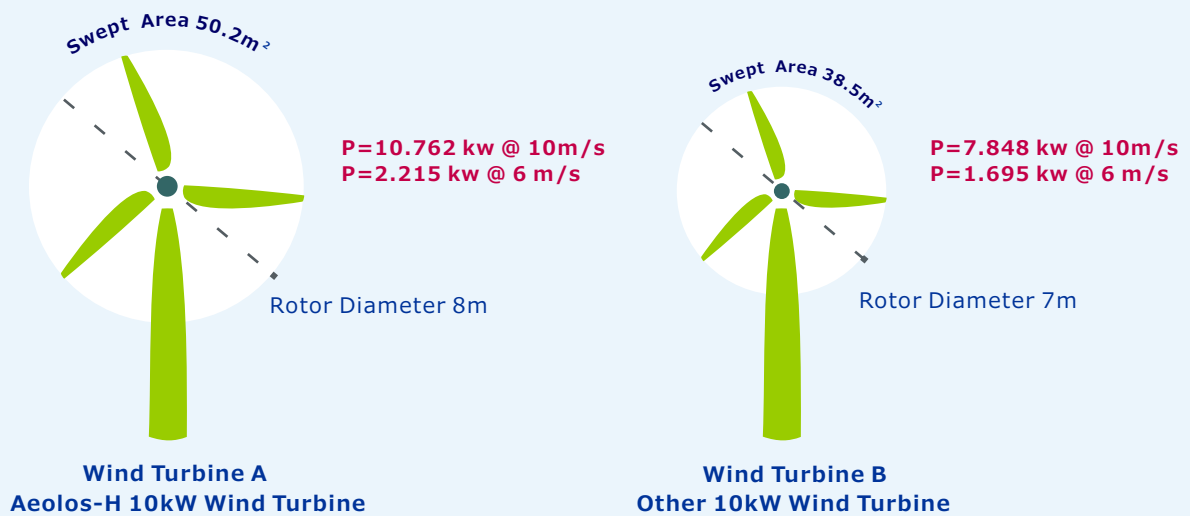
N1= Generator Efficiency

S= Rotor Swept Area

Cp= Wind Energy Utilize Ratio

So there are three factors deciding the wind turbine power output (Rotor Swept Area, Generator Efficiency and Wind energy utilize ratio) at the same wind speed. Aeolos-H 10kW choose **the larger rotor diameter, high efficiency generator** and **high Cp blades design** to produce more power output than other 10 kW wind turbines.

**More 30% Power Output**



**Reliable and less maintenance design**

Aeolos design the wind turbine according to IEC 61400-2 SWT Class-I 50m/s and Extreme operating gust 25m/s wind speed. The wind turbine and tower were strictly designed and tested by the real wind farm running and FEA in computer.



**5 YEAR WARRANTY**

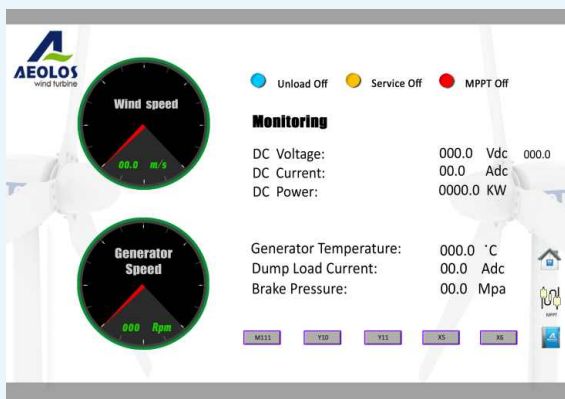




### Intelligent Control System

**Aeolos programmable Logic controller (PLC) with below features:**

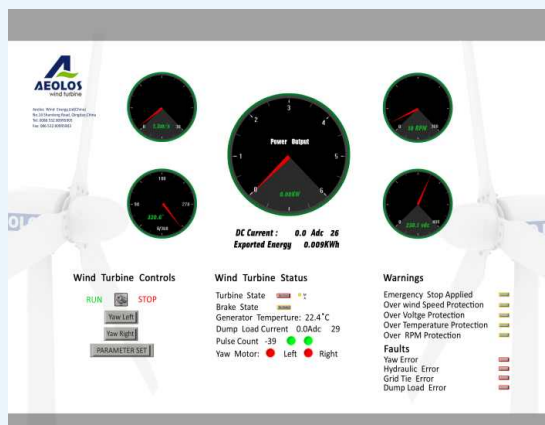
- Flexibility: most of setting parameters are adjustable. User could change the setting parameters according to their own situation.
- Modular design: All of components are modular design, it is easy to replace and scalable.
- High-quality: Aeolos controller integrated the best quality components from ABB and Omron.



**Controller**

### Remote Monitoring system

Aeolos-H 10kW provides remote monitoring system for our customers. You can remote monitor, control and record your wind turbine through internet at home, office, airport or anywhere.



**Remote Monitoring Software**

**5 YEAR WARRANTY**





**5 Years Warranty**

Aeolos wind turbine has 5 years warranty, including all of the parts purchased from Aeolos. For the small components, we will send to customer via DHL or Fedex which will arrive most of cities in the world within 7 days.



**Aeolos + Package**

Aeolos provided some special packages for special places such as low wind speed area, low temperature area, Island, desert, wind & solar hybrid system, Telecom station. Aeolos + service could provide the most suitable products for different customers.



Low temperature area



Island



Desert



Telecom Station



Low wind speed

**Our Customers**



US Navy



California Institute of Technology



SMA



BP



Samsung



Suntech



Siemens



ABB



ENEL



Power One

**5 YEAR WARRANTY**



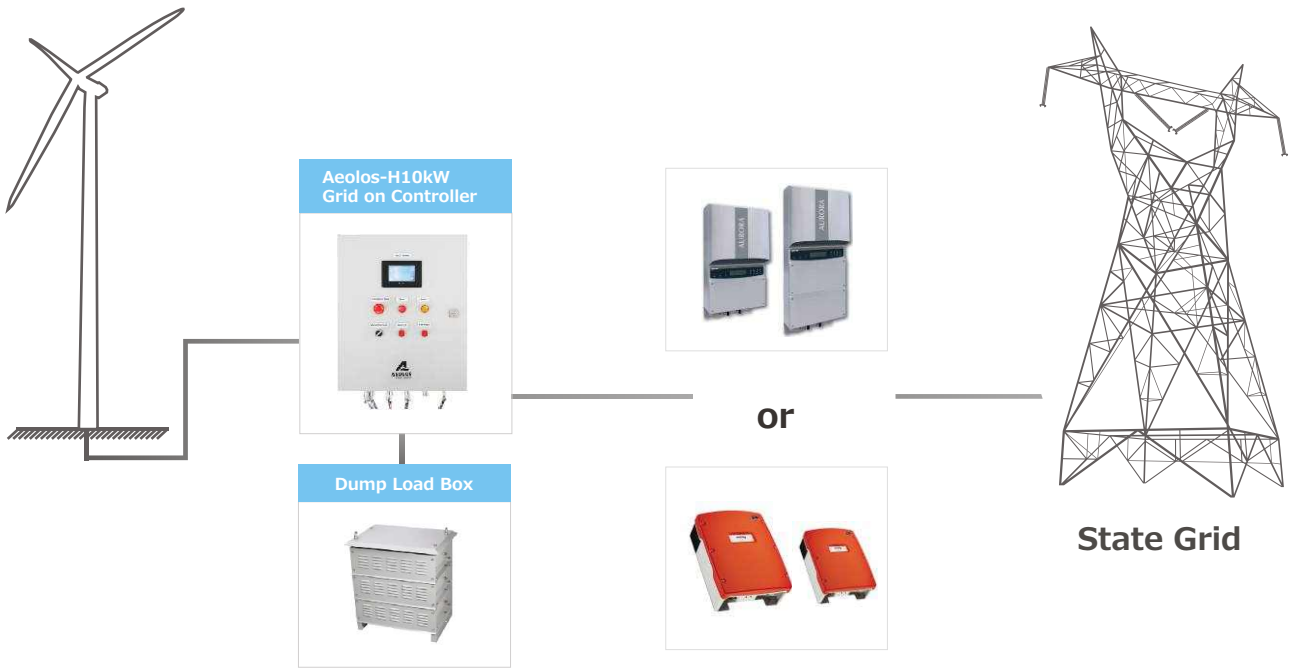


5 YEAR WARRANTY

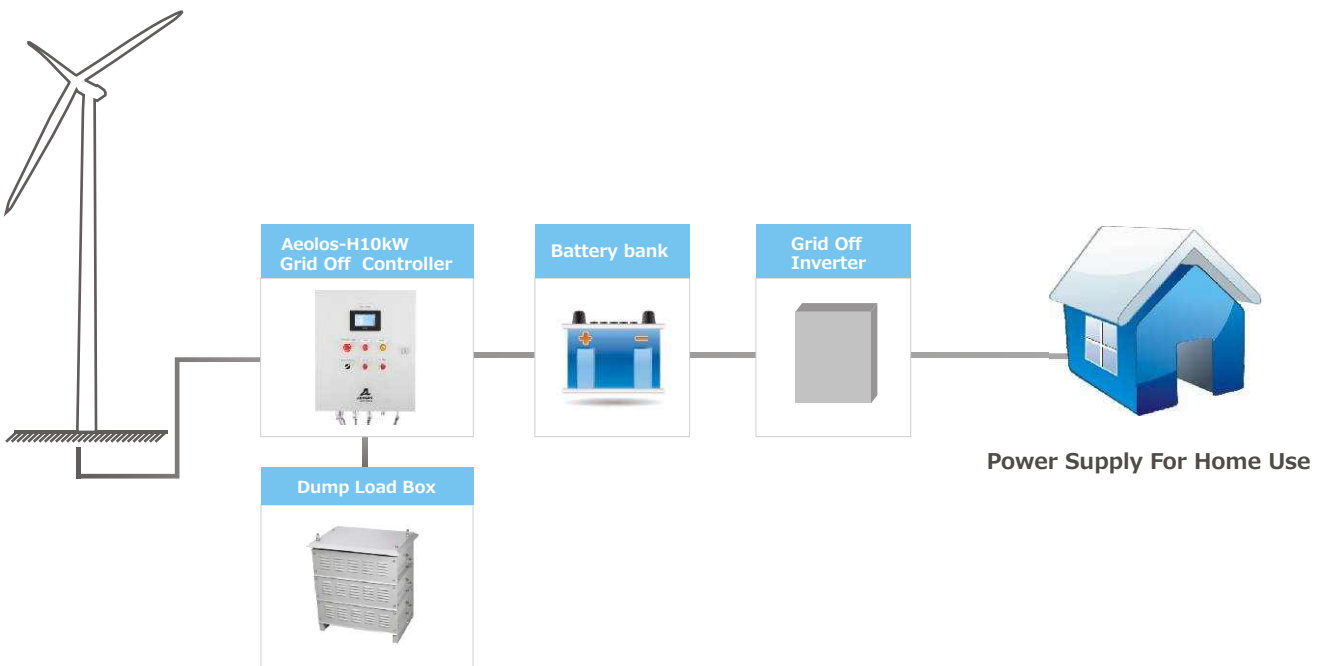




## Wire Diagram *Grid-on*



## *Grid-off*



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**5 YEAR WARRANTY**

