



Aeolos-H 10KW



*Aeolos wind turbine
SINCE 1986*

windturbinestar.com



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windturbinestar.com

Turbine

Rated power	10 kW
Max Power	13 kW
Cut-in wind speed	3 m/s (6.7 mph)
Rated Wind speed	10 m/s (22.3 mph)
Survival wind speed	45 m/s (100.7 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 ² (538.9 ft ²)
Rotor speed	180 rpm
Blade material	Glass Fiber

Generator

Drive Type	Direct Drive (Without Gearbox)
Generator Type	Permanent Magnet Generator
Generator Voltage	300 VDC (Grid-off) 450 VDC (Grid-on)
Efficiency	95%

Controller

ControlSystem	PLC with Touch Screen
Remote Monitoring	Optional

Safety

Main Brake System	YawControl&ElectronicBrake
Secondary Brake System	Mechanical Hydraulic Brake

Tower

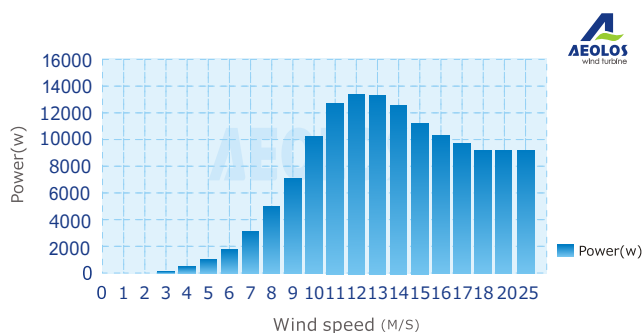
Monopole Tower	12m 18m 24m 30m
Hydraulic Tower	12m 18m 24m

Warranty

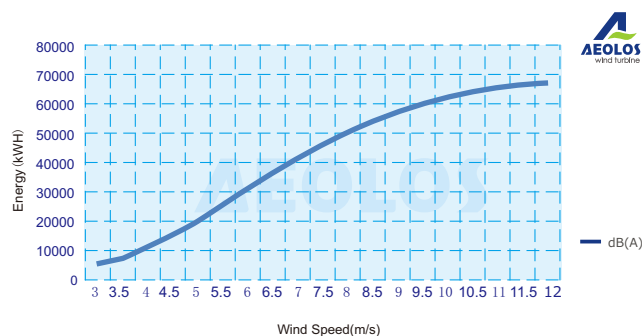
Standard warranty	5 years
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Wind Speed / Power Curve



AEP of 10kW wind turbinr

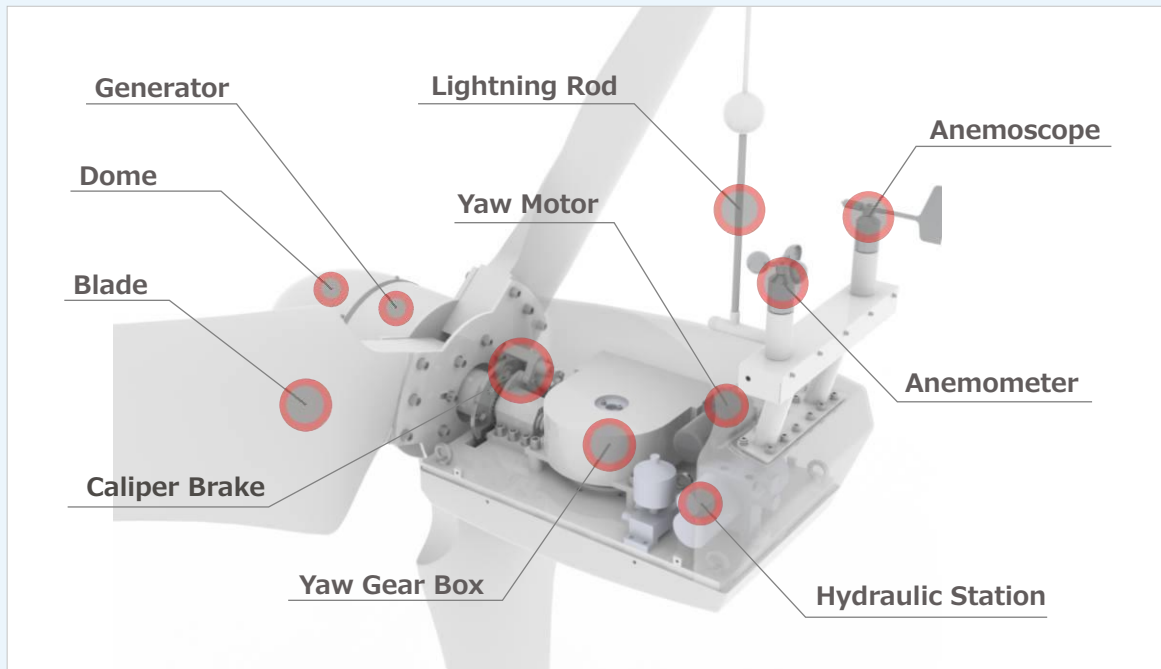


Aeolos-H 10kW Wind Turbine Output

Wind Speed(m/s)	3	4	5	6	7	8	9	10
Generator Power(w)	198	485	1020	1850	3098	4852	7320	10080
Energy (kwh)	5274	10689	20249	31225	41690	50563	57514	62567

5 YEAR WARRANTY





Why Choose AEOLOS-H 10kW Wind Turbine?

Triple Safety & Brake Protection

Yaw Control: PLC controller will control the yaw motor to deviate wind turbine from the wind direction at an angle of 30 degrees, 60 degrees or 90 degrees when it detects the faults of over wind speed, over voltage or generator over temperature.

Electronic Brake: Aeolos-H 10kW has a 15kW dump load box and uses PWM technology as the electronic brake control. PWM could control the over voltage and turbine over speed smoothly.

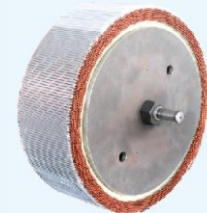
Mechanical Brake: As the secondary protection system, mechanical brake was driven by high quality German hydraulic station. It could stop the wind turbine rotor in over speed, over voltage, over temperature or grid failure.



High Efficiency & Reliable Design

Aeolos-H 10kW uses a directly driven generator without gearbox or booster device. The generator is directly driven by blade rotor. It has 30% more power output than induction generator at the same wind speed.

The directly driven design is more reliable than the induction generator with gearbox. All of the mechanical and electronic components choose the best quality manufacturers like SKF, ABB and Omron. All of designs follow the less or free maintenance principles.



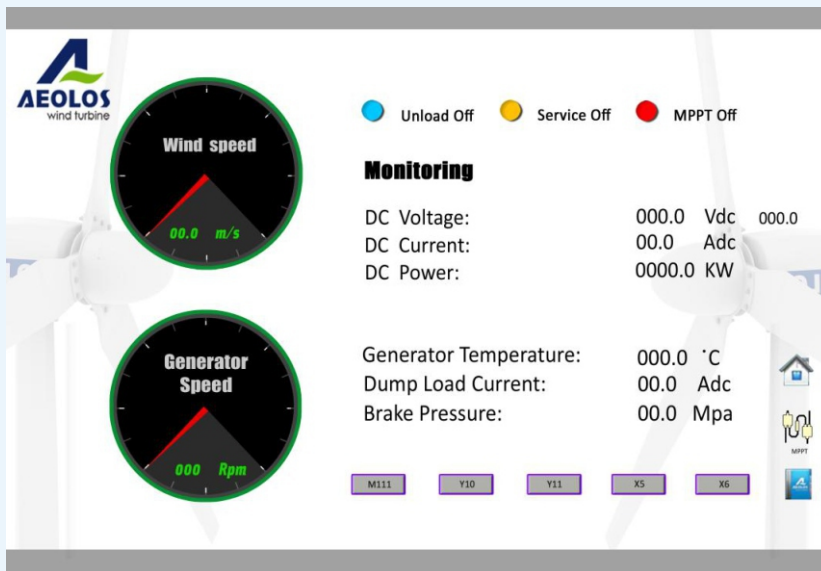
5 YEAR WARRANTY





Intelligent Control & Remote Monitoring

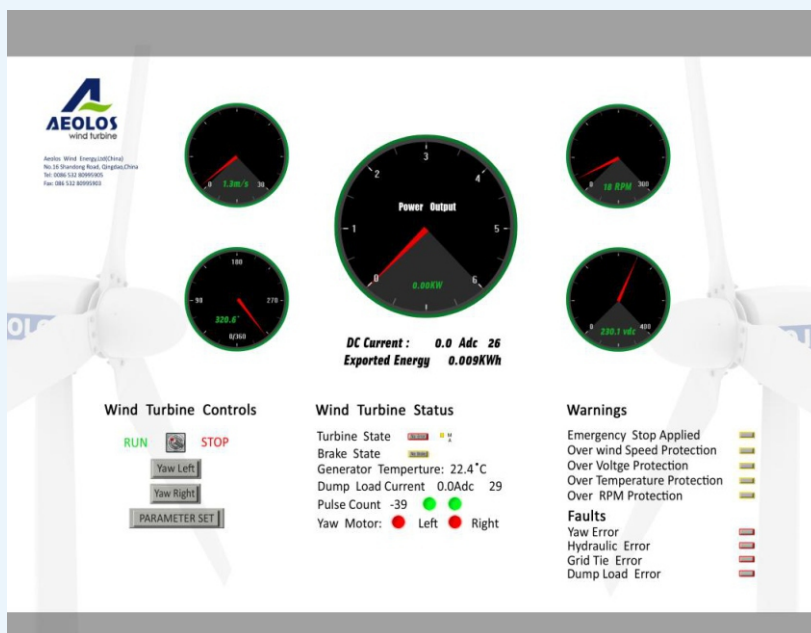
Aeolos employs Programmable logic controller (PLC) and touch screen as the control system. All the operation data like wind speed and power output can be recorded and customer can easily adjust the protection data of wind speed, voltage, current and rpm through controller.



Touch Screen



Aeolos provides remote monitoring function to the customers. You can remotely monitor and control the wind turbine operation through wireless or wire internet in home, office, airport and anywhere.



Remote Monitoring Software



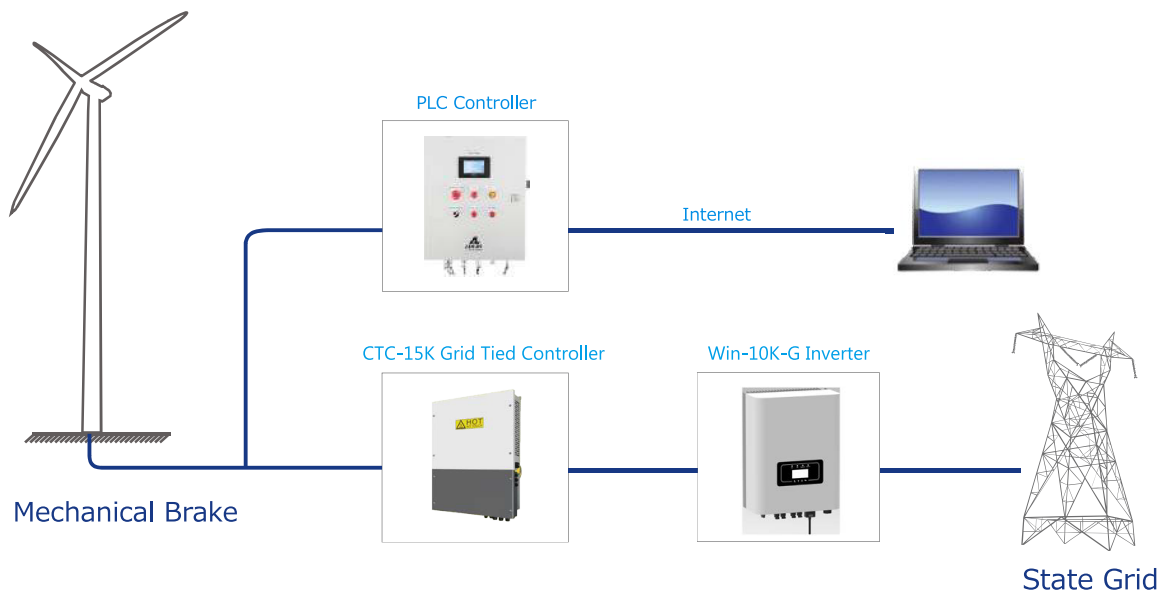
5 YEAR WARRANTY





Wire Diagram

Grid-on



Grid-off

