

Eolo-H 10 kw
wind turbine

Eolo-H 10 wind turbine



ecosolutionitalia

Soluzioni Energetiche Innovative

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 ² (538.9 ft ²)
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

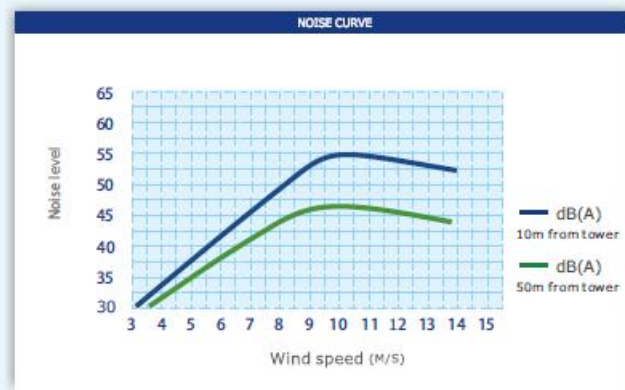
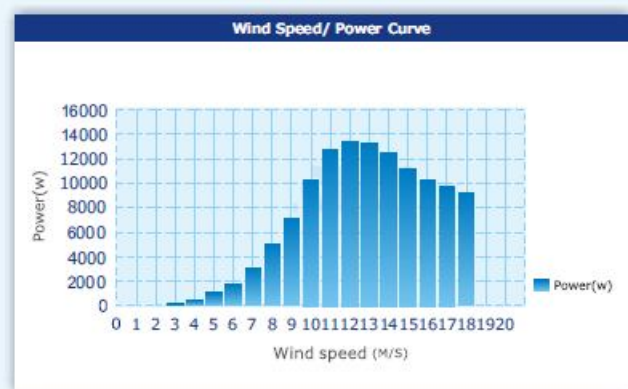
Main Brake System	Yaw Control & Electronic Brake
Secondary Brake System	Mechanical Hydraulic Brake
Back-up Power	24V UPS

Tower

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

Warranty

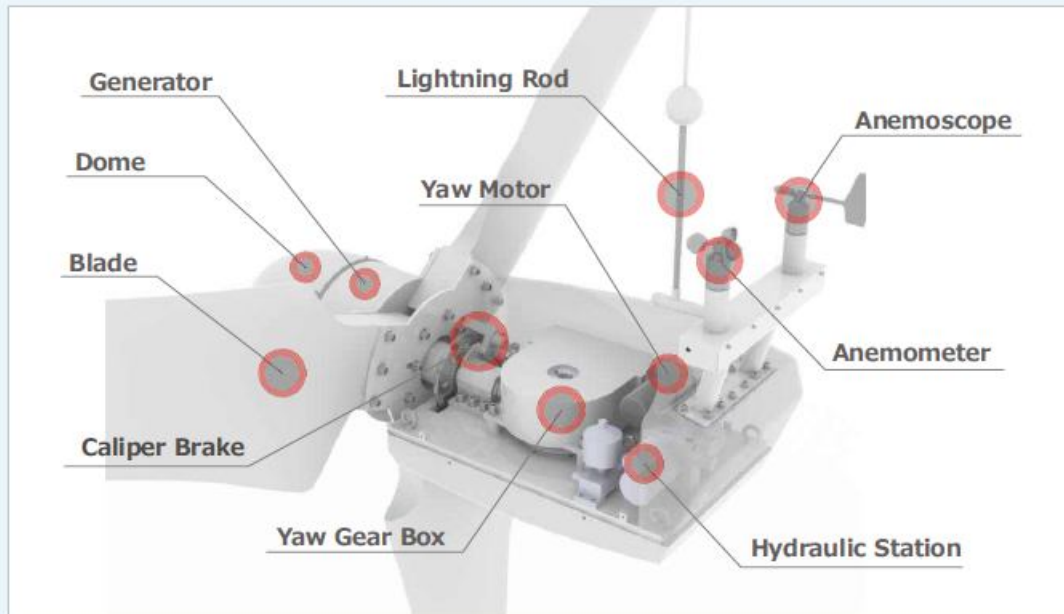
Standard warranty	5 years
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eolo -H 10kW Wind Turbine Output								
Wind Speed(m/s)	3	4	5	6	7	8	9	10
Generator Power(w)	198	485	1020	1850	3098	4852	7320	10080
Annual Energy Output(kwh)	3469	7647	15190	25930	40708	59505	83360	105961

5 YEAR WARRANTY





Why Choose EOLO -H 10kW Wind Turbine?

Triple safety protections

Eolo-H 10 kW use the same design with Mega Watt turbine. Its cost is much higher than traditional 10 kW wind turbine with tail but it is more safety and reliable. Eolo-H 10 kW 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

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

V= Wind Speed

η = 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. Eolo - H 10 kW 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

The wind turbine Eolo-H 10 kW desing according to IEC 61400-2 SWT Class-I 50m/s and Extreme operating gust 25 m/s wind speed. The wind turbine and the tower were strictly designed and tested by the real wind farm running and FEA in computer.



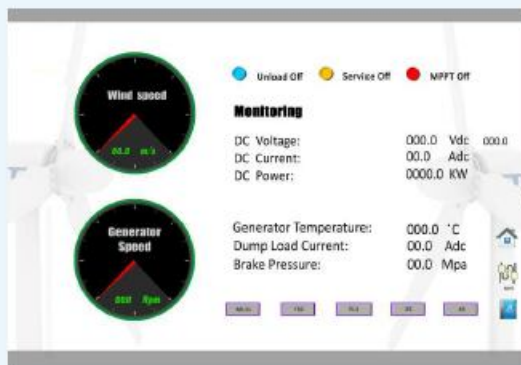
5 YEAR WARRANTY



Intelligent Control System

Eolos programmable Logic controller (PLC) with below features:

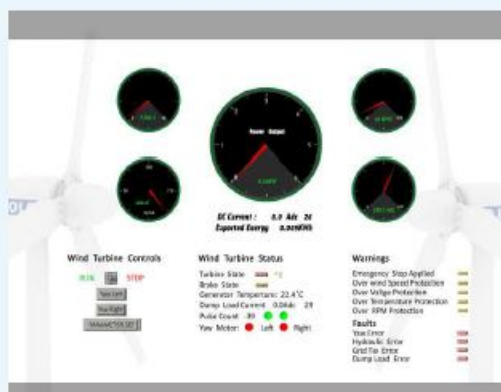
- Flexibility: most of setting parameters are adjustable. User could change the setting parameters according to their own situation.
- Modular design: All of components are modular design, it is easy to replace and scalable.
- High-quality: Eolo controller integrated the best quality components from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



Controller

Remote Monitoring system

Eolo-H 10 kW provided 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



**Eolo-H 10 kW
wind turbine**



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5 YEAR WARRANTY

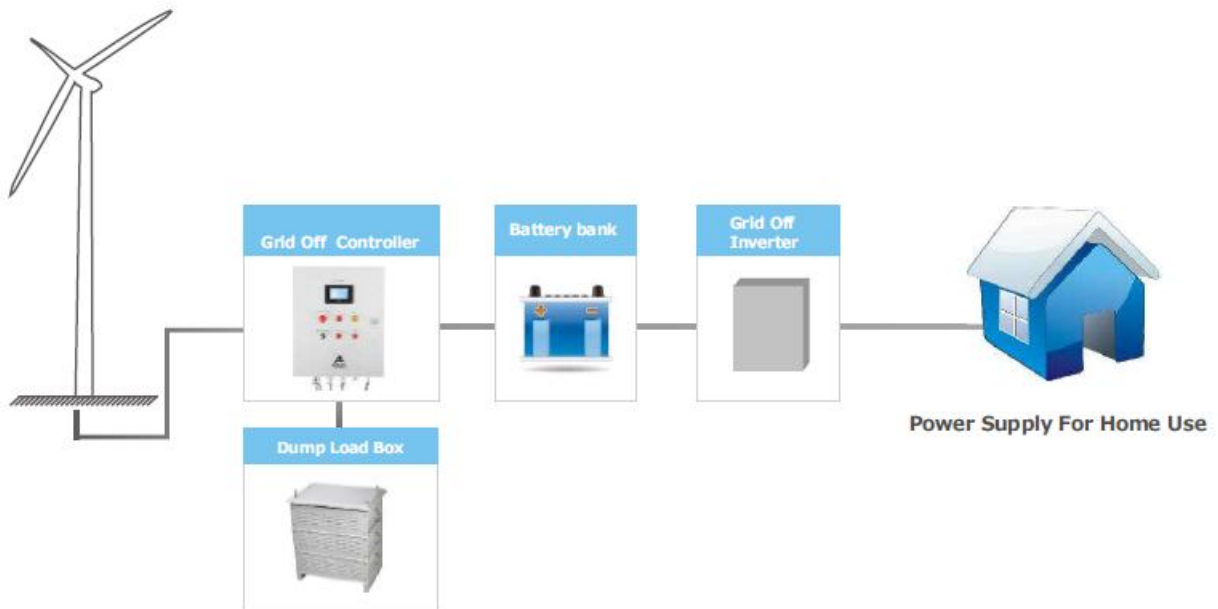


Wire Diagram

Grid-on



Grid-off



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5 YEAR WARRANTY

