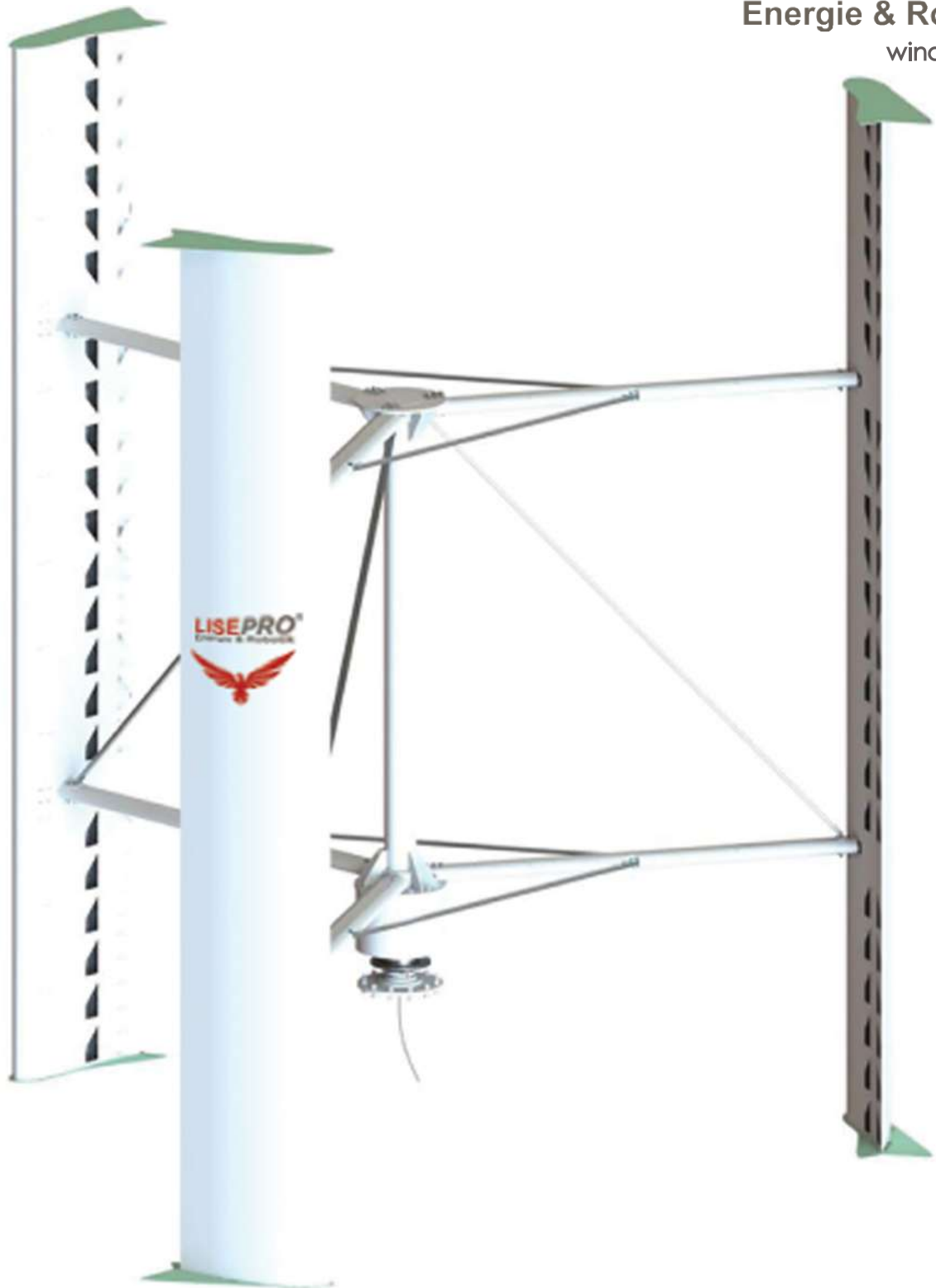


LISEPRO[®]
Energie & Robotik
wind turbine



LisePro-V Series

Vertical Wind Turbine Brochure
LisePro-v 10 kW

lisepro.com



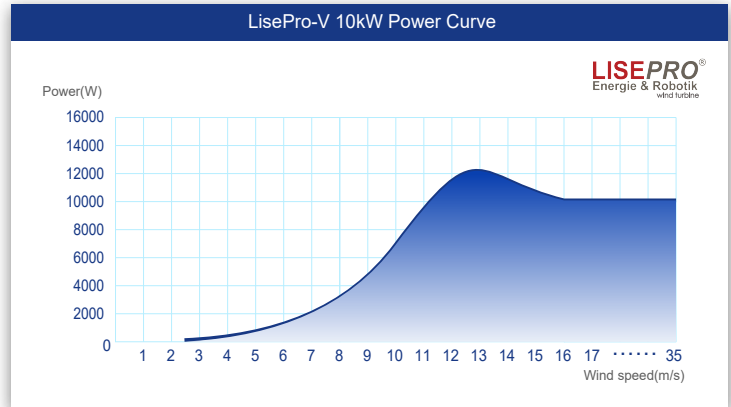
LisePro-V Series

LisePro wind turbine SINCE 1988
lisepro.com



Specification

Generator Type:	Three Phase Permanent Magnet
Rotor Height:	6.0 m (19.7 ft)
Rotor Width:	5.5 m (18.0 ft)
Turbine Weight:	980 kg (2160.5 lbs)
Blade Material:	Aluminum Alloy
Blade Quantity:	3 pcs
Working Temperature:	-20 °C to 50 °C
Design Lifetime:	20 years



Performance

Rated Power:	10 kW
Max Output Power:	12 kW
Cut In Wind Speed:	2.5m/s (5.6 mph)
Rated Wind Speed:	11m/s (24.6 mph)
Survival Wind Speed:	52.5m/s (117.4 mph)
Generator Efficiency:	96%
Noise Level:	< 45 dB(A)
Warranty:	5 years

LisePro-V 10kW Wind Turbine Annual Energy Output

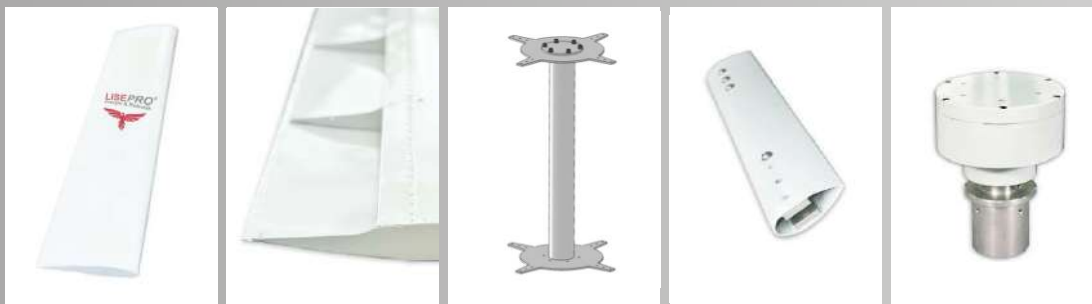
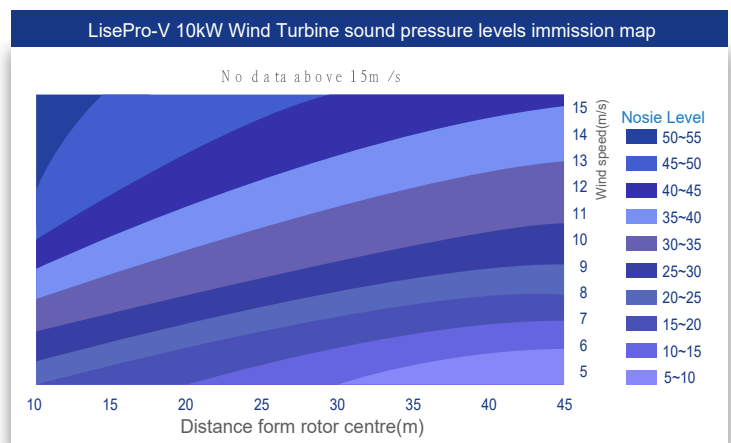
Wind Speed(m/s)	Annual Energy Output(KWh)
3 m / s	3618 kWh
4 m / s	8158 kWh
5 m / s	15026 kWh
6 m / s	23434 kWh
7 m / s	32088 kWh
8 m / s	40061 kWh
9 m / s	46968 kWh
10 m / s	52770 kWh
11 m / s	57576 kWh
12 m / s	61544 kWh

Safety

Blades RPM Limitation:	150 RPM
PWM Dump Load:	12kW Box
Electrical Brake:	Auto/ Manual

Optional

Auto Hydraulic Brake System	Auto/ Manual
Remote Monitoring System (Internet/ Wireless)	
Off Grid:	96/ 120 V
Grid Tied:	400 V



5 YEAR WARRANTY



LisePro Enerjİ Robotik Ltd. (TR)
ATATÜRK MAH. Bingöl sok. 7 / İstanbul
TURKEY
Tel:+90 212 863 2230
E-mail: info@lisepro.com





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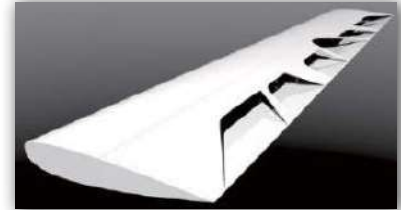
Why Choose Lisepro-V 10 kW Wind Turbine?

Triple Safety Protection

Special Blade Design: LisePro blades use the special aerodynamic design which limits the max rotating speed to 150 rpm even the wind speed is 30m/s or 40m/s. It is safer and more reliable than traditional vertical axis wind turbine.

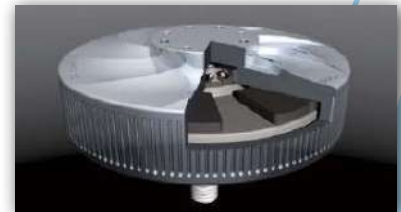
PWM Dump Load: LisePro-V 10kW wind turbine has the 12kW dump load box with PWM loading function. This will consume the over power output and control the voltage in strong wind speed.

Mechanical Brake: The manual mechanical brake can stop the windturbine for maintenance or typhoon coming. We have the auto mechanical brake system for remote installation site without people checking as optional fuction.



High Efficiency

Low Cut-in Wind Speed: LisePro-V 10kW could start up with 1.5m/s wind speed and has the power output in 2.5m/s to inverter. This is more efficient than the vertical wind turbines with a 3.5m/s or even 4.5m/s cut in wind speed.



More Annual Energy Production: According to EN61400-2(IEC 61400-2) standard, LisePro-V 10kW annual output is 15026kWh at 5m/s wind speed. The annual output at 10m/s is 52770 kWh.

MPPT Charger for Off Grid: LisePro-V 10kW uses 96V/120V MPPT charging controller to increase the charging efficiency to 94%. It can charge the battery bank when wind speed is above 3.5m/s.



5 YEAR WARRANTY





LisePro-V Series

LisePro wind turbine SINCE 1988
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Intelligence Control

Remote Monitoring System: Customer can remote monitor the wind turbine operation, wind speed and power output in office, home, airport and anywhere through the internet.



Auto Hydraulic Brake System: It is suitable for the remote installation sites, like the island, telecommunication tower station which does not have people checking and monitoring. This system can auto stop the wind turbine in over voltage, over wind speed, generator over temperature and all any other faults. It can auto release the wind turbine to run after the abnormal warnings.



5 YEAR WARRANTY



LisePro
wind turbine





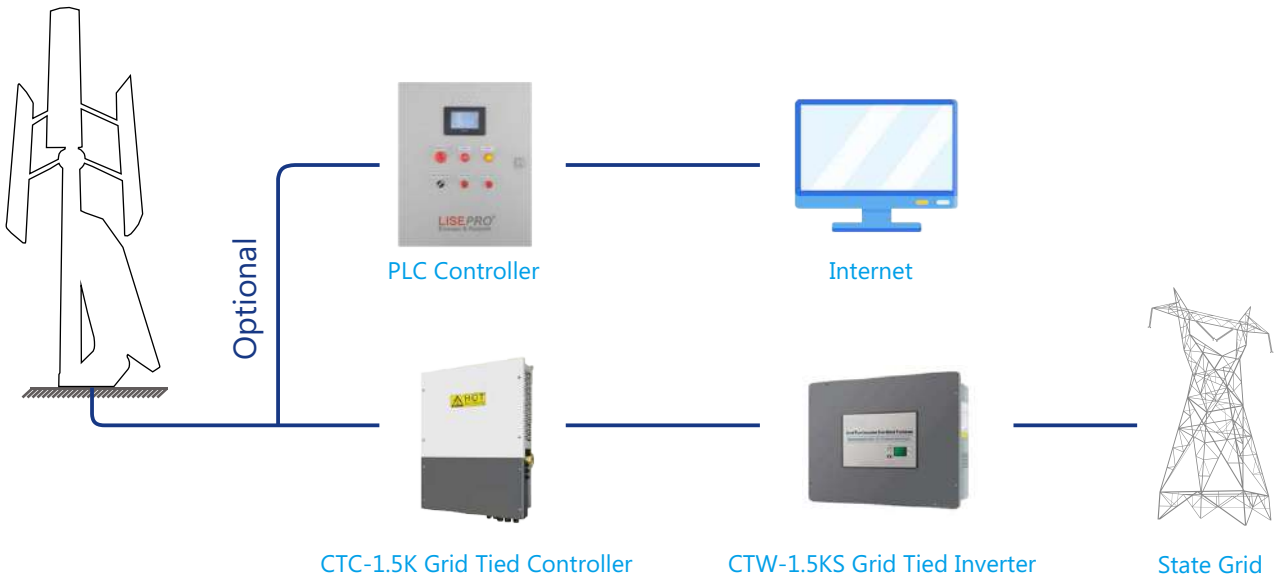
LisePro-V Series

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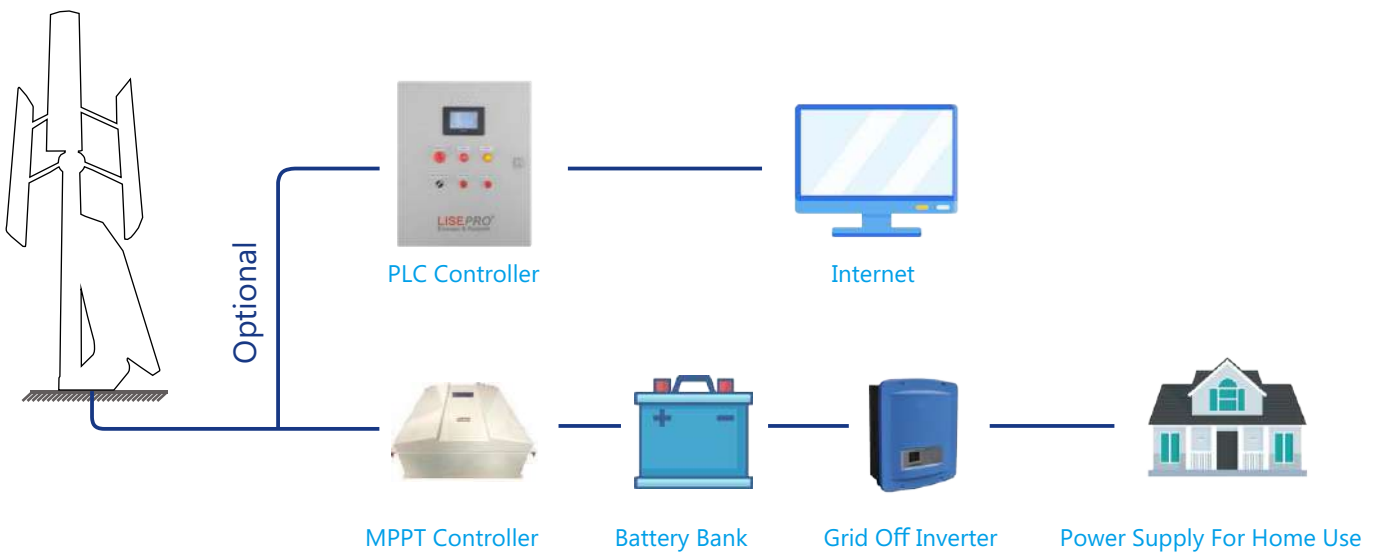


Wiring Diagram

Grid-on



Grid-off



5 YEAR WARRANTY

