

LS Double Helix 1.0

Vertical wind power turbine



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LS Double Helix – ingeniously simple, simply ingenious

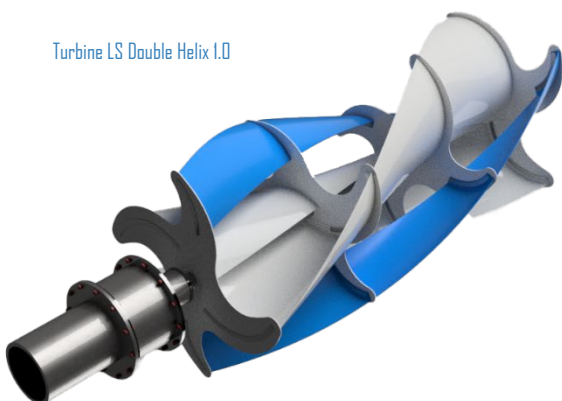
The LS Double Helix 1.0 is our turbine with the most operating hours worldwide. The new design is the logical evolution of the classic Savonius idea, which was introduced by Finnish inventor Sigurd Savonius in 1924. In our design, the two main blades have been supplemented by two new slats to close gaps in the wind window and increase torque.

Due to the helix structure, the wind - no matter from which direction it comes - always hits the same feed surface. The slim and compact silhouette of our LS Double Helix 1.0 blends in with its surroundings in a minimalist way without being overlooked. Weighing 695 lbs, the turbine can be installed on a mast or on a robust roof. The LS Double Helix 1.0 is primarily designed for off-grid use. That means it charges the usual battery packs with 24V/48V via a programmable controller/charge regulator and closes the gaps of the photovoltaic in windy weather phases.

Insights into the LuvSide turbine

Thanks to the controller's volt step-up function, the slim four-blade turbine starts moving at a low wind speed of 9.8 ft/s (6.8 mph) and silently and reliably begins producing electricity (DC). An integrated dumpload ensures a reduction of the energy surplus at wind speeds above 16 fps. With its dynamic design, the LS Double Helix 1.0 brings all the positive characteristics for a regenerative energy solution without CO₂ emissions.

Turbine LS Double Helix 1.0



Output Power

Nominal Power	1.0 kW at 49 fps
Start-up wind speed	9.8 fps (6.8 mph)
Max. wind speed before destruction	164 fps (112 mph)

Turbine Dimension

Diameter	4.6 ft
Height	9.8 ft
Rotor Surface	10.8 spft
Weight	695 lbs
Speed of Rotation	100-140 rpm
Number of rotor blades	12 Pcs.
Material	Glassfiber plastic (GRP)

Generator

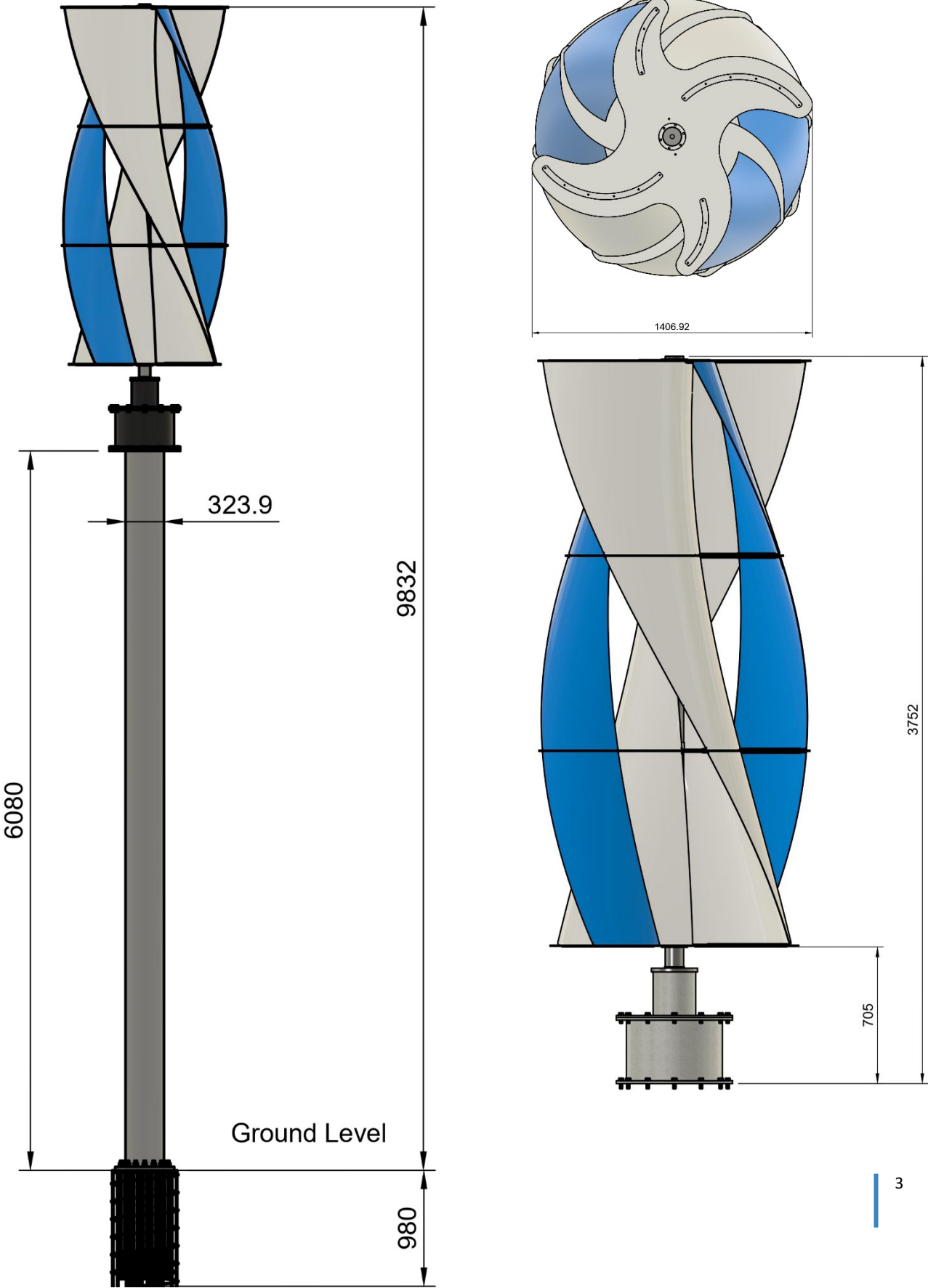
Typ	PMSG
Rated Output Power	1 kW
Rated Output Voltage	130 VAC
Rated Speed	130 rpm
Charge Controller	24/48 VDC

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Dimensions (in mm)

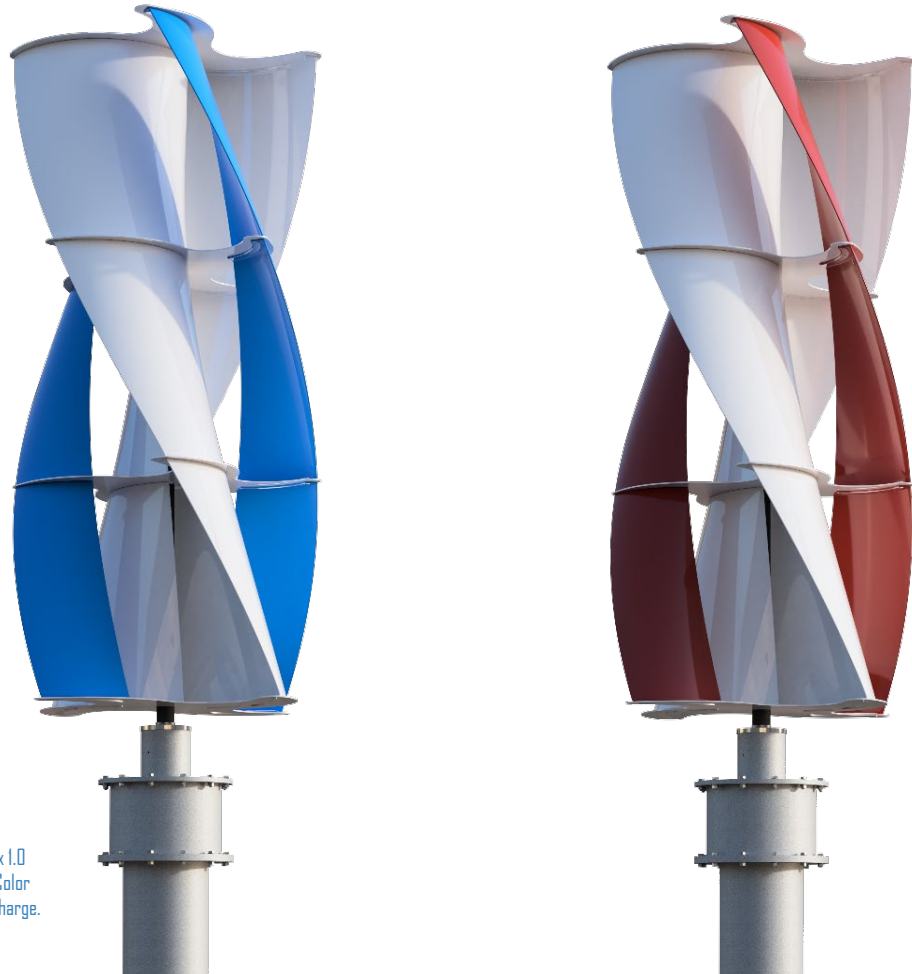


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Systems



The standard color of our LS Double Helix 1.0 turbine is classic, Bavarian white/blue. Color variants are available for an additional charge.

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LuvSide GmbH

Wind power technology
Krankenhausstraße 18
86911 Diessen am Ammersee
Germany

Phone +49 89 1892 83 54
info@luvside.de | www.luvside.de

Distributor for the African Continent:

Energy Systems Africa
209 Rondebult road, Farrar park
Boksburg, Johannesburg, 1459
South Africa

Phone +27 82 552 76 78
Rodney Love: r.love@esafrika.co.za