

Vortex Tacoma

Datasheet & User Guide

Release beta

Welcome to your new Vortex Tacoma wind energy generator. This device is suitable for land or marine use, alone or in combination with photovoltaic panels or other energy sources.

General Considerations

Read, understand and respect all this user guide.

Make sure that your installation complies with the legal requirements and accreditations of your territory.

Professional installation is highly recommended.

The quality of the wind and the rigidity of the fixation are important factors for the optimal device performance. Vortex Tacoma is suitable for urban and turbulent environments. In general, the higher the location, the greater the power collected.

Usable for charging batteries or injecting power into a frequency inverter, booster or regulator.

Installation

Your Vortex Tacoma is delivered completely assembled. For fixing and wiring, adequate tools are needed.

From a mechanical point of view, Vortex Tacoma is a reasonably safe product, but install the device so there is no possibility of accidental contact with mobile mast.

Do not install the device on a windy day or day with bad weather.

In order to have a strong and rigid fixation a stable and solid anchoring surface must be selected.

Position the device vertically on a smooth surface before tightening the screws.

Controller specification should be accordance with voltage, power and current of the battery set, solar panel hybrid installation and Vortex wind generator.

Wiring issues

Losses due to excessive cable length can be significant. If the distance is large, we recommend to use cables of greater section than the one specified in the standards.

Sealed to IP68 (IEC 60529) 3-poles marine protection connector with gold plated contacts that accept 20 through 22 AWG cable.

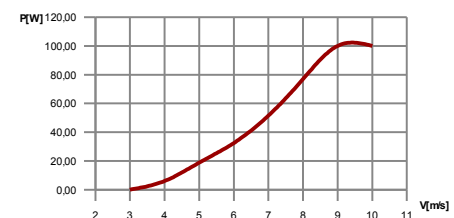
The connection between components should be fixed and reliable.

It is essential to observe the proper polarity of the wiring.

Specifications

kWh/Month (avg. vel. 5.4 m/s)	24 kWh/m
Rated Power	100 W
Max. Power	109 W
Rated Voltage	24 Vdc
Total Height	2,75 m
Max. Diameter	0,261 m
Max. Amplitude Angle	2,7°
Max. Oscillation Freq. (Aprox.)	7,5 Hz
Net Weight	14 Kg
Start-up Wind Speed	3,0 m/s
Cut-in Wind Speed	3,5 m/s
Nominal Wind Speed	9 m/s
Rated Oscillation Frequency	6,9 Hz
Survival Wind Speed	35 m/s
Swept Area	0,97 m ²
Operating Temp. Range	-25°C~60°C
Screws Number	5
Ø Screws	M5
Wire Cores Number	3
Recommended Fuse Size	10A
Regulator Adjust. Range (Aprox.)	27.1 Vdc~33.0 Vdc
IEC Requirements	Pending

Power Curve



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