

## Sizes and Prices

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### **What are the prices?**

Version	Capacity	Price in dollars, Euros, or British pounds depending on your region
1 meter high	100 watts	Not chosen
2.7 meter high	500 watts	2,500
4-meter high	2 kilowatts	7,500
	3 kilowatts	10,500
	5 kilowatts	14,000
6 meters high	2 kilowatts	7,500
	3 kilowatts	10,500
	5 kilowatts	14,000

### **What version should I buy?**

We currently recommend the 6-meter high version for the ground or very strong roofs only.

For most roofs, or for the ground, we recommend the 4-meter high version.

Both require a flat surface on the ground or on the roof.

The 2.7-meter high version is “residential”.

The residential size can be bolted to a slanted roof by your local contractor. The smallest size is a “personal turbine” for use on a boat, camping, etc. Small charging and battery charging.

### **How do I know how many kilowatts to order for the larger versions?**

In general, that depends most on your wind speed. Here is a table

Wind Speed Average	Recommended version in kilowatts
<5 meters per second	2
5-6 meters per second	3
>6 meters per second	5

There are other factors in addition to average wind speed. For example, if you have frequent high gusts, the average is not so useful a number, so you would be better off increasing the capacity of your order.

Here is the reason: The power output is proportional to the velocity cubed. So in the power formula, let's compare the effect of 10 meter per second wind versus 1 meter per second wind. If the relationship were linear, the 10 meter per second wind would carry 10 times as much power. In fact, because the effect is cubed, it carries  $10 \times 10 \times 10$  divided by  $1 \times 1 \times 1$ , which is 1000 times as much power! That is why low average winds with high gusts can sometimes be better for wind energy than steady winds without gusts.

In general, if your average is 6 meters per second, you can count on good results from your wind turbine.

### **What is off grid and what is on grid?**

An on-grid system is connected to your local utility's power system. An off-grid system will usually store your electricity.