

Skystream 3.7™ Frequently Asked Questions

What is Skystream 3.7™?

Skystream 3.7™, developed by Southwest Windpower in collaboration with the U.S. Department of Energy's National Renewable Energy Laboratory, is the newest generation in residential wind technology. Skystream 3.7™ has a 1.8 kW rating and is the first fully integrated small wind generator specifically designed for the grid-connected market. Skystream 3.7™ is designed for homeowners looking to reduce or eliminate their monthly electric bills.



Skystream 3.7™ is a down-wind (wind hits the blades on the downwind side of the tower) direct drive (gearless or no transmission) permanent magnet wind generator. Skystream 3.7™ uses an innovative 12 ft. rotor and produces approximately 400 kWh per month in a 12 mph wind.

The initial prototype has been operating at the U.S. Department of Energy's National Renewable Energy Laboratory in Colorado for almost two years and has undergone extensive performance, reliability and duration testing in accordance with internationally accepted testing standards.

What will it cost and how long will it take to pay for itself?

Skystream 3.7™, installed, costs approximately \$7,000 to \$10,000, depending on tower height and installation costs. Cost includes the generator, operation controls, inverter and tower. Skystream 3.7™ is also available with taller towers to accommodate a location's wind resource.

Skystream 3.7™ is capable of producing energy at a fraction of the cost of other small wind, solar photovoltaics or reciprocating engine technology. Skystream 3.7™ is expected to produce energy for under \$0.09/kWh. Depending on installed cost, average wind speed, local cost of electricity and state rebates, Skystream 3.7™ can pay for itself in as little as 5 years.

For a typical home in California, where the cost of energy is \$0.14/kWh, the Skystream 3.7™ will produce 400 kWh per month assuming a 12 mph average wind. This will save a household \$672 per year on their utility bill. At this rate, they will pay for their Skystream 3.7™ system in approximately 12 years (after rebates, payback is as low as 7 years*).

Some states and countries offer incentive investment programs that can cover as much as 60% of the cost of a Skystream 3.7™. To learn more about these and other incentive programs go to www.skystreamenergy.com.

* Assuming an installed cost of \$8500.00

What makes this product unique?

Skystream 3.7™ is unique for being the first all-inclusive wind generator with controls and inverter built-in. Skystream 3.7™ was designed for very low winds, reaching rated power at just over 20 mph. In addition to the innovative technology, Southwest Windpower invested heavily in tooling to reduce component cost. Doing so makes it possible to sell Skystream 3.7™ at such a low price.

The base price includes a 35 ft. freestanding (no guy wire) tower that looks much like a standard light pole. Its full 1800 watts is achieved at 20 mph with a maximum rotor speed of 325 RPM. Because of the exceptionally low RPM, the machine operates very quietly.

A visually aesthetic shape played a key role in the design to show that a wind generator is not only a clean source of energy but pleasing to the eye.

Who can install this system?

Southwest Windpower recommends installing Skystream 3.7™ at sites with the following criteria:

- Adequate Wind Resource: Minimum average wind speed for Skystream 3.7™ is 10 mph. Ideal sites have 12 mph average wind or greater.
- Site Free from Obstructions: Clean, unobstructed wind is best for Skystream 3.7™. The top of the tower should be a minimum of 20 feet above any surrounding object within a 300 foot radius. Although the machine can be installed on smaller lots of land, properties of one acre or more are typically ideal as they will more likely have unobstructed wind.
- Suitable Zoning: Tower installation must comply with local zoning regulations. It is also advisable to make sure there are no HOA (Home Owner Association) regulations that prohibit the use of towers.
- Interconnection with Utility: Local utility must allow for interconnection. The 1979 federal PURPA act requires small systems can connect to the electrical grid; but homeowners should consult their local utility.
- Consumers should have an electricity cost of \$0.10/kWh or greater. They should consult with their local utility or look at their electric bill.

Where can this system be purchased?

Skystream 3.7™ will be distributed through Southwest Windpower's 20 year-old dealer network. Please visit our website to locate your local distributor.