

SKYSTREAM 3.7™

④ 1.8kW Small Wind Turbine

HIGHLIGHTS

Overview

A 1.8kW small wind turbine suitable for powering rural domestic properties and many more applications.

④ The Southwest Windpower Skystream 3.7 is a brand new product from one of the world's leading small wind turbine manufacturers in the US and comes with a 5 year warranty.

Performance

The energy capture of the Skystream 3.7 turbine is exceptionally good across a wide range of wind speeds, and comes with options for a 10m or 14m free-standing tower.

Reliability

The Skystream 3.7 turbine is intended for a range of conditions, especially rural locations. The design life of the machine is 20 years and has been extensively tested by the US Government's NREL organisation.

Cost

The Skystream 3.7 is very competitively priced and has been designed for ease of installation to minimise costs. It has a fully integrated grid connected inverter, making it virtually "plug and play".



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Low Carbon Buildings Programme



④ ASSOCIATION MEMBERSHIPS

Segen is meeting the need for affordable clean energy.

Segen is committed to the production of clean and affordable energy through the development of sustainable energy generation projects.

Segen is an authorised distributor and installer for the Southwest Windpower Skystream 3.7 1.8kW turbine which is a very cost effective small wind turbine. The Skystream 3.7 wind turbine generates exceptional levels of power for its cost.

Segen can supply, install and support the Skystream 3.7 turbine to power rural domestic properties and many more applications.

Segen works in a partnership with site owners, financiers, suppliers and other stakeholders to guide projects through the process until the energy starts to flow and beyond.

Segen also sells the Westwind 20kW, Iskra AT5-1 5kW and Southwest Windpower Whisper 500 3.2kW wind turbines, for larger, more power hungry applications.

④ SEGEN



▶ 1.8kW Skystream 3.7 Technical Specification

COST EFFECTIVE LIFETIME POWER GENERATION

Efficiency

The efficient three blade configuration drives the permanent magnet rotor.

At rated rpm, the automatic electronic over speed protection mechanism limits the RPM of the turbine.



Reliability

Southwest Windpower have been developing and selling small wind turbines for many years to operate in the harsh US climate.

The generator is sealed to stop the ingress of foreign particles. This reduces corrosion (especially in coastal locations) but also stops the magnets attracting airborne particles.

The Skystream 3.7 is a brand new model developed in collaboration with the world renowned US Government's National Renewable Energy Labs (NREL) organisation.

Characteristics

Generator rating	1.8 kW at 10 m/s
Rotor speed	325 rpm nominal (variable)
Cut-in wind speed	3.5 m/s
Survival wind speed	63 m/s (140 mph)
Rotor diameter	3.7 m
Rotor orientation	Downwind
Number of blades	3
Blade material	Carbon reinforced fibreglass.
Control system	Electronic stall control.
Gearbox	None
Brakes	Electro-dynamic
Generator	Permanent magnet alternator
Yaw control	Passive downwind yawing
Tower height	10m or 14m Free Standing
Tower	Free standing.

Performance

At a particular location, the wind speed will vary about an annual mean value. The expected energy yields for the Skystream 3.7 at various annual mean wind speeds (AMWS) is shown below.

AMWS m/s	Annual MWh	Daily kWh
4	1.9	5.3
5	3.8	10.5
6	5.4	14.8
7	6.7	18.4
8	7.7	21
9	8.9	24

Note: The annual electricity consumption of a medium size home is in the region of 4 to 6 MWh. This is equivalent to a daily consumption of 11 to 16 kWh.