



CONERGY

Small wind turbines | Technical data

Conergy SWT 7500 DC

Flexible, efficient and robust

The Conergy SWT 7500 DC is a robust small wind turbine for Off-grid systems. Typical applications range from house or village electrification, water pumping to small enterprises. The Conergy SWT 7500 DC has been specially designed to withstand extreme climates and has proven its reliability for more than 15 years. It is equipped with a patented passive pitch control which enables the wind turbine to keep a stable energy output in strong winds. This unique system also guarantees a storm proof design which can even be installed without concrete foundations.

In combination with a Conergy ISA hybrid inverter, the Conergy SWT 7500 DC can be integrated into a hybrid system with different energy sources such as photovoltaic or diesel generator. The Conergy SWT 7500 DC requires only very little maintenance and is easily self-assembled and self-installed on either concrete or steel foundations. A special feature is the 7m high flat roof version, which can be installed without roof anchor.



WIND POWER

Rotor

Diameter	6 m (19.7 ft)
Number of rotor blades	4
Position	Upwind
Speed	75-125 1/min
Design of blades	Steel/fiber-glass composite structure
Design of Hub	Rigid, solid steel

Drive assembly

Gear unit design	Spur gear, 2 steps i=12.1
Generator	
Type	Asynchronous
Rated power	7.5 kW
Speed	1500 1/min
Rated voltage	120 V, 3-phase, 75 Hz

Power characteristics

Rated power	7.5 kW
Cut-in wind speed	3 m/s (7 mph)
Rated speed	11.5 m/s (25.8 mph)
Cut-out wind speed	None
Survival wind speed	60 m/s (135 mph)

Control systems

Power control	
Aerodynamical	Passive blade pitch change
Electrical	Electronically monitored load resistors (not inc.)
Yawing control by	Wind vane

Safety systems

Aerodynamical	Blade pitch change
Mechanical	Disk brake, spring-loaded, mechanically released

Tower

Design	Hot-galvanized steel tube braced on 4 sides
Hub height	13 m (42 ft) or 19 m (62 ft)

Masses

Individual rotor blade	12 kg (26 lb)
Machine nacelle, complete	Approx. 240 kg (530 lb)
Mast, 1 part, roof installation only, 7 m (23 ft)	Approx. 110 kg (242 lb)
Mast, 2 parts, hub height 13 m (42 ft)	Approx. 220 kg (485 lb)
Mast, 3 parts, hub height 19 m (62 ft)	Approx. 330 kg (727 lb)

Available from:

SWT7500 DC-TD-ENG-0608