



## RENEWABLE ENERGY



3kW Wind Turbine Systems

### SMALL WIND TURBINE SYSTEMS - ON GRID Male vetrne elektrarne mo i do 3kW

TYPE **WS**

Our small wind turbine plants implementation include  
Naša dejavnost na podro ju vetrnih elektrarn vklju uje

- positional studies, site survey / prou avanje lokacije vetrne elektrarne
- advising in designing / svetovanje in projekriranje
- outside electrical system design / elektro inženiring
- equipment supply / dobavo strojne, mehanske in elektro opreme
- constructions, building systems / postavitve in nadzor nad deli
- permissions / pridobivanje dovoljenj
- maintenance and renovation works / vzdrževanje in modernizacija

The principle of operation is very similar to solar power, the only difference is to uses the wind instead of sun.

Princip delovanja je zelo podoben son ni elektrarni, razlika je samo v tem, da se pri enem izkoriš a veter, pri drugemu pa sonce.

For more information please contact  
Za ve informacij

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Delež elektrike iz vetrnih elektrarn po svetu raste najhitreje med vsemi na ini proizvodnje elektrike. Vetrne elektrarne ne proizvajajo odpadkov ali nevarnih kemi nih snovi, gradnja je hitra, stroški obratovanja so nizki, predvsem pa je veter obnovljiv vir energije, ki se zaradi izkoriš anja ne iztroši.

Mo i vetrnih elektrarn se gibljejo od nekaj kW do nekaj MW. Z napredovanjem tehnologije se te mo i vedno bolj pove ujejo. Male vetrne elektrarne proizvedejo elektri no energijo, ki zadoš a za oskrbo ve je ali par majših družin. Primerne so za vse, predvsem pa tiste, ki živijo na obrobjih mest ali na podeželju. Nasmetijo se na zemljo ali strehe. Sestavni deli elektrarne na veter so:

- steber
- ohišje (generator elektri ne energije in ostali pomembni deli; menjalnik hitrosti, rotor, sistem za spreminjanje smeri, itd., ki jih varuje ohišje)
- lopatice (navadno 2 - 3).

Vetrna elektrarna potrebuje za delovanje veter s hitrostjo najmanj 2,5 m/s. Vetrne elektrarne proizvedejo najve energije pri hitrostih med 12 in 25 m/s, pri višjih hitrostih pa se ustavijo, da ne pride do poškodb.

The share of electricity from wind power in the world is growing fastest among all methods of electricity production. Wind turbines do not produce waste or hazardous chemicals, construction is fast, running costs are low, especially the wind is a renewable source of energy to exploit non wears.

Wind turbine systems power range from a few kW to several MW. With the advancement in technology that is increasing all the time. Small wind turbines generate electricity that is sufficient for one big or some small families. Components of wind power plants are:

- Tower
- Housing (electric power generator and other important parts of the transmission speed, rotor system for changing direction, etc.)
- The blades (usually 2 - 3).

Wind power plant needs to operate with wind speeds of at least 2.5 m/s. Wind turbines produce optimum energy at speeds between 12 and 25 m/s, at higher speeds they stop to avoid damage.

## Applications / Uporaba

	MAIN PARAMETERS / Karakteristike	WIND TURBINE SYSTEM
1	MODEL	WS-3KW
2	RATED POWER (W) / Nazivna mo	3000W
3	RATED VOLTAGE (W) / Nazivna napetost	120V
4	ROTOR DIAMETER (M) / Premer rotorja	3,7
5	START-UP WIND SPEED (m/s) / Za etna mo vetra	2,5
6	RATED WIND SPEED (m/s) / Nazivna mo vetra	12
7	SECURITY WIND SPEED (m/s) / Varnostna mo vetra	45
8	RATED ROTATING RATE (m/s) / Stopnja vrtenja	300
9	BLADE MATERIAL / Material lopatic	Glass fiber
10	BLADE QUANTITY / Število lopatic	3

