

ZONHAN 5KW 48V Wind turbine generator off grid



1. Application

A wind turbine, which is installed on top of a tall tower, collects kinetic energy from the wind and converts it to electricity that is compatible with a home's electrical system.

In a normal residential application, a home is served simultaneously by the wind turbine and a local utility. If the wind speeds are below cut-in speed (7-10 mph) there will be no output from the turbine and all of the needed power is purchased from the utility. As wind speeds increase, turbine output increases and the amount of power purchased from the utility is proportionately decreased. When the turbine produces more power than the house needs, the extra electricity is sold to the utility. All of this is done automatically. There are no batteries in a modern residential wind system.

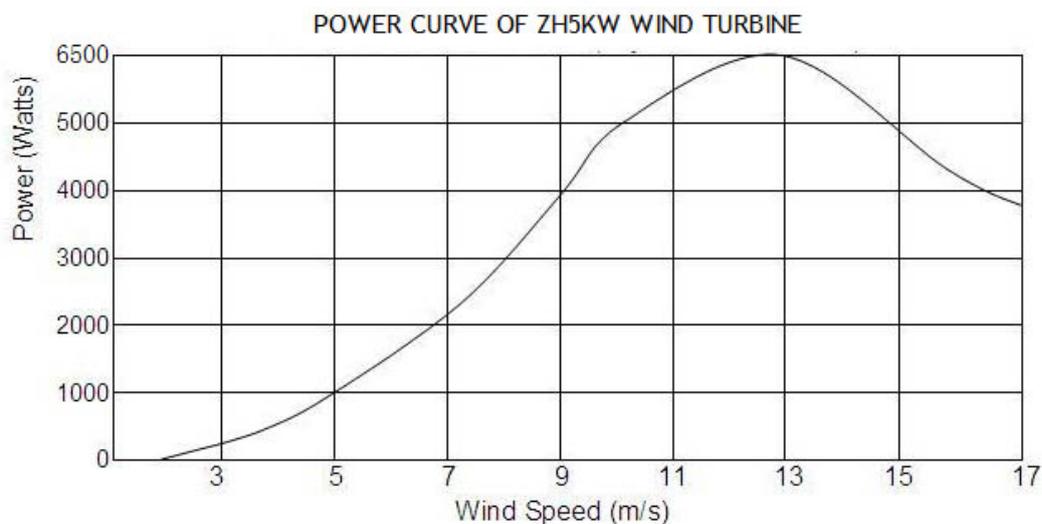
Small wind systems for remote applications operate somewhat differently, and it needs batteries.

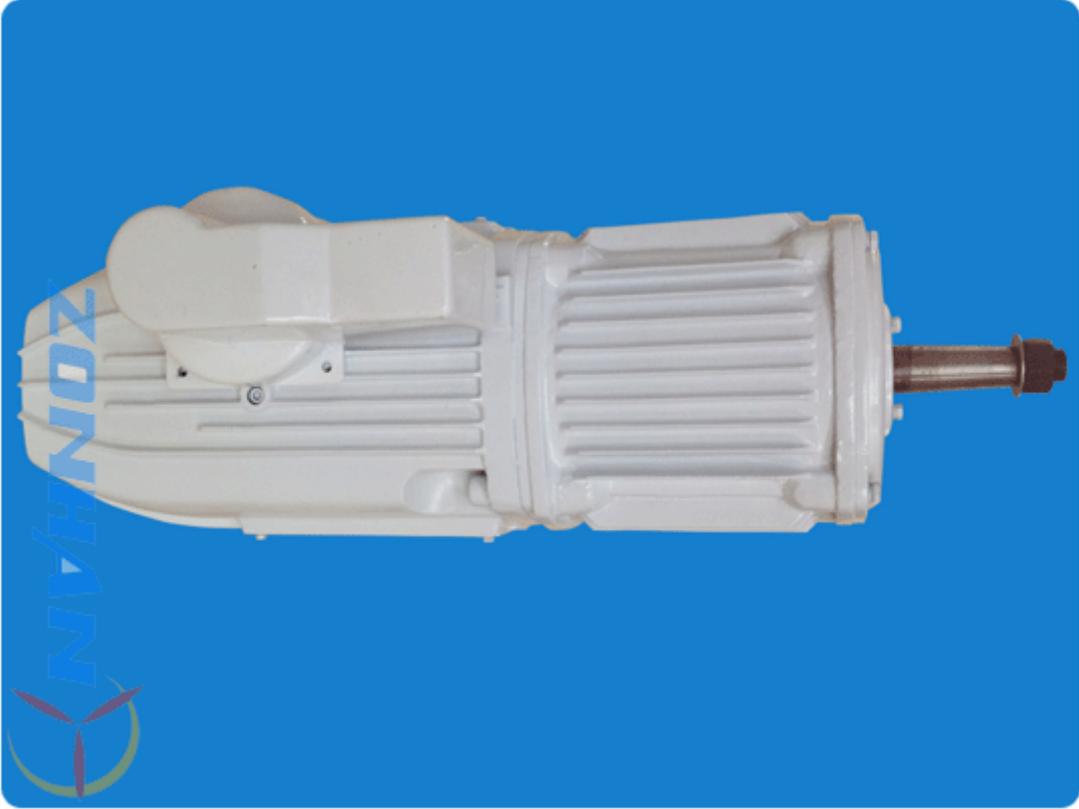
2. Structure and Main performance

ZONHAN turbines are made of strong cast steel that makes them durable. ZONHAN turbines can withstand harsh environments like strong winds and cold weather. Using high performance NdFeB permanent magnet, the alternator is high efficient and compact. The unique electro-magnet design makes the bonding force and cut-in speed very low.

3. Main technical performances

Rotor Diameter (m)	6
Material and number of the blades	Reinforced fiber glass*3
Rated power/maximum power	5000/6500w
Rated wind speed (m/s)	10
Startup wind speed (m/s)	3
Working wind speed (m/s)	3~25
Survived wind speed(m/s)	45
Working voltage	DC48V (Higher voltage optional)
Generator style	Three phase, permanent magnet
Blade pitch control	No, fixed pitch
Weight	320kg
Noise	55db(A) From 50m With a Wind Speed of 8m/s
Lateral Thrust	24KN at 50m/s
Tower height (m)	9
Suggested battery capacity	12V/200AH Deep cycle battery 4pcs
Life time	15years







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