



4kW 2nd Generation VAWT



Information

The 4kW Vertical Axis Wind Turbine can be used in any area of good wind resource. Whether on the roof of a residential or commercial building or in a rural setting, the wind turbine provides reliable electricity for its owner.

The system includes the wind turbine and controller. The customer can choose to also include the tower or roof-mount and the off-grid or grid-tie inverter. Towers and roof mounts are available for different applications, as are electrical components to meet local utility requirements. Owners of the 4kW Vertical Axis Wind Turbine that choose the off-grid inverter may wish to add batteries for power storage for times when wind speeds are low.

Vertical axis wind turbines offer many advantages over traditional horizontal axis wind turbines. Not only will the vertical axis wind turbine achieve higher average power output in areas where turbulent winds are present, but it is also significantly quieter than horizontal axis models. As a result, vertical axis wind turbines work well on rooftops, making them particularly useful in residential and urban environments.

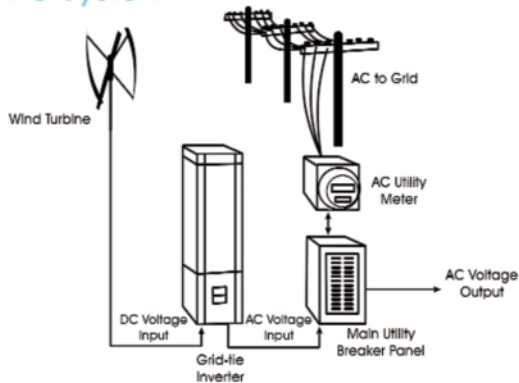
We supply components such as the grid-tie inverter based on local utility specifications to ensure that your wind turbine will qualify for state incentives that may apply. Your local distributor or the Database of State Incentives for Renewables and Efficiency (DSIRE) can help you better understand what incentives you may qualify for.

Please contact us at info@windenergymena.com or visit our website at www.windenergymena.com for more information.

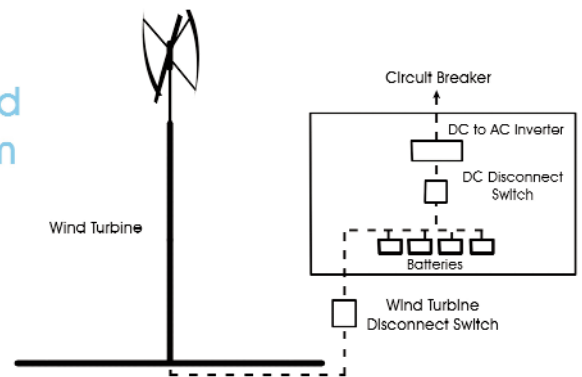


Schematics

Grid-Tie System



Off-Grid System



Specifications

Performance:

- Rated Power - 4 kW
- Rated Wind Speed - 12 m/s
- Operating Range - 3 - 25 m/s
- Maximum Wind Speed - 50 m/s
- Noise Level at 3 Meter Distance:
 - @ <7 m/s - < 27 DB
 - @ 7 - 10 m/s - < 32 DB
 - @ 10 - 13 m/s - < 37 DB

Physical Parameters:

- Mill size - 2m x 3.5m (78" x 138")
- Tower Height (Standard) - 5.5m (18')
- Gross Weight w/o tower - 190kg (425 lbs)
- Gross Weight w/ tower - 500kg (1120 lbs)
- Gross Weight w/ roofmount - 275kg (620 lbs)

Generator

- Type: -Permanent Magnet Direct Drive Generator
- Rated Temperature - -40°C to 115°C

DC Controller

- Rated Power - 4kW
- Output Voltage - 48V DC (Off Grid)
- 200-400V DC (Grid-Tie)

Off-Grid Inverter:

- Input (DC) - 48V DC
- Rated Frequency - 50/60 Hz
- Overload - 150% 10 second

Grid-Tie Inverter:

- Manufacturer: Power-One (Aurora)
- Input (DC) - 200 - 400V DC
- Grid-Tie Inverter is ordered to meet local grid specifications

