**Vertical axis wind turbine generator**

**EN-400W-XL Technical Datasheet**

**Part No:** EN-400W-XL

**Description:** The permanent magnetic EN-400W-XL wind turbine has high-efficient energy output, is the most compact, quiet, rugged and reliable vertical axis small wind turbine generator. The EN-400W-XL wind turbine is widely used in LED lighting system, signal & camera security, telecommunication field for off-grid residence. The EN-400W-XL wind turbine is extremely easy to integrate with solar panels to create off-grid power systems that require modest amounts of energy. Available in 12V, 24V for battery charging applications.

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### Design

1. The EN-400W-XL is designed on a unique low inertia axial flux generator which utilizes Neodymium permanent magnetic material.
2. The EN-400W-XL has zero cogging with its highly efficient, allow the turbine to generate power at very low wind speeds and deliver a high output in working wind speeds.
3. The EN-400W-XL can survive from winds up to 40m/s by a passive aero-dynamic design that reduces turbine RPM and power output at a certain threshold.
4. The robust aluminum alloy chassis and stainless steel components are protected by the aerospace grade coatings and anodizing.

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### Advantage

- **High outputs**
  - Permanent magnet-generator, low cogging torque at 2.0m/s
- **Quiet**
  - Low noise, just 40dB above background
- **Reliable**
  - Precision aerodynamic design from aircraft engineering
- **Rugged**
  - Durable, withstands storm force winds up to 40m/s
- **Light**
  - Small shape, easy to install and maintain

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### Features

**EN-400W-XL wind turbine**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbine diameter</td>
<td>0.52 meter</td>
</tr>
<tr>
<td>Rotor Type</td>
<td>Vertical spiral, non-wind direction required</td>
</tr>
<tr>
<td>Blade Material</td>
<td>Enhanced glass fiber, UV resistant</td>
</tr>
<tr>
<td>Rated output</td>
<td>400w at 13m/s</td>
</tr>
<tr>
<td>Peak output</td>
<td>450W</td>
</tr>
<tr>
<td>Cut-in speed</td>
<td>2m/s</td>
</tr>
<tr>
<td>Blades height</td>
<td>1.05 meter</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>12V, 24V</td>
</tr>
</tbody>
</table>

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**EN-400W-XL Wind Turbine Power Curve**

*Wind turbine performance is subject to many factors. All output data contained in this document is indicative and actual turbine outputs will depend on the prevailing site and installation conditions.*