The GP Yonval 40-16 is designed to generate high levels of energy, in accordance with the IEC 61400-2 standards and manufactured with reliable European components.

The variable speed active stall control system maximizes the power production for below rated wind speed and ensures a safe power limitation above rated wind speed.

This three bladed wind turbine is a reliable 40 kW small wind turbine with a high performance.
GP Yonval 40-16: 40 kW Wind Turbine

The new GP Yonval 40-16 is designed to generate high levels of energy, in compliance with the IEC 61400-2 and manufactured with reliable European components.

At this stage, we have already installed several small wind turbines in Europe, and we look forward to strength our international presence.

The GP Yonval 40-16 offers the following competitive advantages:

- Robust and reliable wind turbine as based on proven and long lasting components
- Simple and effective design
- Intelligent Controller with integrated Power Converter
- Low noise level
- Competitive price

The GP Yonval 40-16 is designed in accordance with the IEC 61400-2 standard

Turbine Safety activation

- At high wind speed the nacelle is yawed out of the wind
- Stall regulated blades
- Rotor over speed
- Generator over temperature
- Generator over current
- Power converter radiators over temperature
- Grid over voltage
- Grid failure
- Wind sensor failure
- Controller failure
- Emergency button pressed
- Low temperature into the controller
## TECHNICAL DATA : 40 kW Wind Turbine

### Turbine

<table>
<thead>
<tr>
<th>Configuration</th>
<th>3 blades, horizontal axis, upwind, SWT Class III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>40 kW</td>
</tr>
<tr>
<td>Rated wind speed</td>
<td>11 m/s</td>
</tr>
<tr>
<td>Cut-in wind speed</td>
<td>3.5 m/s</td>
</tr>
<tr>
<td>Cut-out wind speed</td>
<td>24 m/s</td>
</tr>
<tr>
<td>Extreme wind speed</td>
<td>52.5 m/s</td>
</tr>
<tr>
<td>Yaw System</td>
<td>Active / Electric</td>
</tr>
<tr>
<td>Applications</td>
<td>On-Grid</td>
</tr>
</tbody>
</table>

### Rotor

<table>
<thead>
<tr>
<th>Rotor diameter</th>
<th>16 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swept area</td>
<td>200 m²</td>
</tr>
<tr>
<td>Rotor speed @ 11 m/s</td>
<td>50 rpm</td>
</tr>
<tr>
<td>Blade material</td>
<td>Fiberglass – reinforced epoxy</td>
</tr>
<tr>
<td>Power regulation</td>
<td>Active stall - Torque control</td>
</tr>
</tbody>
</table>

### Generator

<table>
<thead>
<tr>
<th>Type</th>
<th>Induction generator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuration</td>
<td>3x400 VAC / 50 Hz</td>
</tr>
<tr>
<td>Gearbox</td>
<td>1:29.95</td>
</tr>
</tbody>
</table>

### Safety systems

- Fail-safe brake
- Variable speed active yaw control system
- Active generator torque control

### Controller

- Intelligent controller with integrated power converter
- RS 485 for remote monitoring and control
- User-friendly touch screen control

### Warranty

- Turbine - Controller: 2 years (warranty extension available as an option)

### Tower

- Free standing monopole: 20, 24 and 30 m (at hub height)
The GP Yonval 40-16 represents a new standard for small wind turbines.

Regulated by torque control and by its intelligent controller with integrated power converter, it ensures optimum performance and efficiency.

The variable speed active stall control system maximizes the power production for below rated wind speed and ensures a safe power limitation above rated wind speed.

The simplicity of the design, the high quality of all components and the aerodynamic blades design ensure exceptional power production and very low noise.

Specifications in this data sheet may be modified without prior notice.

The annual energy production of a Wind Turbine cannot be predicted with certainty, as it depends on many factors like the location, the site wind resource, the hub height and many other factors. Any estimation given by us will not constitute any form of guarantee.