Yingli Green Energy (NYSE:YGE) is one of the world’s largest fully vertically integrated PV manufacturers. With over 4.5 GW of modules installed globally, we are a leading solar energy company built upon proven product reliability and sustainable performance. Founded in 1998, Yingli Green Energy serves customers through our U.S. subsidiary, Yingli Americas, co-headquartered in New York and San Francisco. We are the first renewable energy company to sponsor the U.S. National Soccer teams and the FIFA World Cup™.

**PERFORMANCE**
- Industry leading in-house manufacturing of polysilicon, ingots, wafers, cells and modules ensures tight control of our material and production quality.
- High performance, multicrystalline solar cells deliver a module series efficiency of up to 15.6%, reducing installation costs and maximizing the kWh output per unit area.
- Tight positive power tolerance of -0W to +5W ensures modules are delivered at or above rated power, improving system performance through the reduction of module mismatch loss.

**QUALITY & RELIABILITY**
- Robust, corrosion resistant aluminum frame independently tested to withstand wind and snow loads of up to 50 psf and 113 psf, respectively, ensuring mechanical stability.
- Manufacturing facility certified to ISO9001 Quality Management System standards.
- Module packaging optimized to protect product during transportation and minimize on-site waste.

**WARRANTIES**
- Leading limited power warranty* ensures 91.2% of rated power for 10 years, and 80.7% of rated power for 25 years.
- 10-year limited product warranty.

*In compliance with our warranty terms and conditions.

**QUALIFICATIONS & CERTIFICATES**
**ELECTRICAL PERFORMANCE**

**Electrical parameters at Standard Test Conditions (STC)**

<table>
<thead>
<tr>
<th>Module type</th>
<th>YL255P-29b</th>
<th>YL250P-29b</th>
<th>YL245P-29b</th>
<th>YL240P-29b</th>
<th>YL235P-29b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power output $P_{max}$ W</td>
<td>255</td>
<td>250</td>
<td>245</td>
<td>240</td>
<td>235</td>
</tr>
<tr>
<td>Power output tolerances $\Delta P_{max}$ W</td>
<td>$\pm0/5$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module efficiency $\eta$ %</td>
<td>15.6</td>
<td>15.3</td>
<td>15.0</td>
<td>14.7</td>
<td>14.4</td>
</tr>
<tr>
<td>Voltage at $P_{max}$ $V_{mpp}$ V</td>
<td>30.6</td>
<td>30.4</td>
<td>30.2</td>
<td>29.5</td>
<td>29.5</td>
</tr>
<tr>
<td>Current at $P_{max}$ $I_{mpp}$ A</td>
<td>8.32</td>
<td>8.24</td>
<td>8.11</td>
<td>8.14</td>
<td>7.97</td>
</tr>
<tr>
<td>Open-circuit voltage $V_{oc}$ V</td>
<td>38.7</td>
<td>38.4</td>
<td>37.8</td>
<td>37.5</td>
<td>37.0</td>
</tr>
<tr>
<td>Short-circuit current $I_{sc}$ A</td>
<td>8.88</td>
<td>8.79</td>
<td>8.63</td>
<td>8.65</td>
<td>8.54</td>
</tr>
</tbody>
</table>

**Electrical parameters at Nominal Operating Cell Temperature (NOCT)**

| Power output $P_{max}$ W | 184.7 | 181.1 | 177.9 | 174.3 | 170.7 |
| Voltage at $P_{max}$ $V_{mpp}$ V | 27.9 | 27.6 | 27.2 | 26.6 | 26.6 |
| Current at $P_{max}$ $I_{mpp}$ A | 6.63 | 6.56 | 6.54 | 6.56 | 6.42 |
| Open-circuit voltage $V_{oc}$ V | 35.7 | 35.4 | 34.5 | 34.2 | 33.8 |
| Short-circuit current $I_{sc}$ A | 7.19 | 7.12 | 6.99 | 7.01 | 6.92 |

NOCT: open-circuit operating cell temperature at 800W/m² irradiance, 20°C ambient temperature, 1 m/s wind speed

**THERMAL CHARACTERISTICS**

| Nominal operating cell temperature NOCT °C | 46 +/- 2 |
| Temperature coefficient of $P_{max}$ $\gamma$ %/°C | -0.45 |
| Temperature coefficient of $V_{oc}$ $\beta_{Voc}$ %/°C | -0.33 |
| Temperature coefficient of $I_{sc}$ $\alpha_{isc}$ %/°C | 0.06 |
| Temperature coefficient of $V_{mpp}$ $\beta_{Vmpp}$ %/°C | -0.45 |

**OPERATING CONDITIONS**

- Max. system voltage: 600Vcc
- Max. series fuse rating: 15A
- Limiting reverse current: 15A
- Operating temperature range: -40 to 194°F (-40 to 90°C)
- Max. static load, front (e.g., snow and wind): 113 psf (5400 Pa)
- Max. static load, back (e.g., wind): 50 psf (2400 Pa)
- Hailstone impact: 1 in (25 mm) at 51 mph (23 m/s)

**CONSTRUCTION MATERIALS**

- **Front cover** (material/type/thickness): Low-iron glass / tempered / 3.2 mm Glass may have anti-reflective coating
- **Cell** (quantity/material/type/dimensions/area/# of busbars): 60 / polysilicon / multicrystalline / 156 mm x 156 mm / 243.3 cm² / 2 or 3
- **Encapsulant** (material): Ethylene vinyl acetate (EVA)
- **Frame** (material/color): Aluminum alloy / anodized silver or black
- **Junction box** (protection degree): ≥IP65
- **Cable** (type/length/gauge/outside diameter): PV Wire / 43.31 in (1100 mm) / 12 AWG / 0.244 in (6.2 mm)
- **Plug connector** (manufacturer/type/protection degree): Amphenol / H4 / IP68

**GENERAL CHARACTERISTICS**

- **Dimensions** (L/W/H): 64.96 in (1650 mm) / 38.98 in (990 mm) / 1.57 in (40 mm)
- **Weight**: 42.1 lbs (19.1 kg)

**PACKAGING SPECIFICATIONS**

- **Number of modules per pallet**: 26
- **Number of pallets per 53’ container**: 34
- **Packaging box dimensions** (L/W/H): 67 in (1700 mm) / 45 in (1150 mm) / 47 in (1190 mm)
- **Box weight**: 1177 lbs (534 kg)

**Units**: inch (mm)

---

Yingli Green Energy Americas, Inc.
info@yingliamericas.com
Tel: +1 (888) 686-8820

© Yingli Green Energy Holding Co. Ltd. | YGE60CellSeries2013_EN_201301_V01

Warning: Read the Installation and User Manual in its entirety before handling, installing, and operating Yingli modules.

Our Partners