

YL310P-35b YL305P-35b YL300P-35b YL295P-35b

YL290P-35b



U.S. Soccer Powered by Yingli Solar

YINGLI SOLAR U SERIES Designed specifically for utility-scale projects and certified by UL for system voltages up to 1000V.



## **DURABLE**

Certified to withstand wind loads of 2400Pa, snow loads of 5400Pa, ammonia, and salt mist to ensure performance in adverse conditions.

## **ECONOMIC**

Larger string sizes lower installation costs by decreasing the required number of wire runs and combiner boxes.

## **SAFE**

UL certification conveys confidence in product safety to authorities having jurisdiction throughout the U.S. and Canada.



<sup>\*</sup> In compliance with our warranty terms and conditions.

#### TRUSTED PARTNER



The YGE-U 72 Cell Series is fully compatible with single-axis solar tracking systems manufactured by Array Technologies, which can boost system performance by up to 25% depending on site location.



#### QUALIFICATIONS & CERTIFICATES

UL 1703 and ULC 1703, CEC, FSEC, ISO 9001:2008, ISO 14001:2004, BS OHSAS 18001:2007, SA8000





## **U.S. TARIFF-COMPLIANT**



If you buy from Yingli Americas, Yingli Americas acts as the importer and complies with all applicable tariffs. Customers can buy from Yingli Americas with no worry that they will be liable for any import tariffs.

# YGE-U72 CELL SERIES

## **ELECTRICAL PERFORMANCE**

| Electrical parameters at Standard Test Conditions (STC) |                   |   |            |            |            |            |            |
|---|-------------------|---|------------|------------|------------|------------|------------|
| Module type   |                   |   | YL310P-35b | YL305P-35b | YL300P-35b | YL295P-35b | YL290P-35b |
| Power output  | P <sub>max</sub>  | W | 310        | 305        | 300        | 295        | 290        |
| Power output tolerances                                 | ΔP <sub>max</sub> | % |            |            | -0 / +3    | "          |            |
| Module efficiency                                       | ηm                | % | 15.9       | 15.6       | 15.4       | 15.1       | 14.9       |
| Voltage at P <sub>max</sub>                             | V <sub>mpp</sub>  | ٧ | 36.3       | 36.1       | 35.8       | 35.6       | 35.3       |
| Current at P <sub>max</sub>                             | Impp              | Α | 8.53       | 8.45       | 8.37       | 8.29       | 8.22       |
| Open-circuit voltage                                    | Voc               | ٧ | 45.6       | 45.4       | 45.2       | 45.0       | 44.8       |
| Short-circuit current                                   | Isc               | Α | 8.99       | 8.93       | 8.86       | 8.79       | 8.73       |

STC:  $1000W/m^2$  irradiance, 25°C cell temperature, AM 1.5g spectrum according to EN 60904-3 Average relative efficiency reduction of 3.3% at  $200W/m^2$  according to EN 60904-1

| Electrical parameters at Nominal Operating Cell Temperature (NOCT) |                  |   |       |       |       |       |       |
|--|------------------|---|-------|-------|-------|-------|-------|
| Power output   | P <sub>max</sub> | W | 226.1 | 222.5 | 218.8 | 215.2 | 211.5 |
| Voltage at P <sub>max</sub>  | V <sub>mpp</sub> | V | 33.1  | 32.9  | 32.7  | 32.4  | 32.2  |
| Current at P <sub>max</sub>  | Ітрр             | Α | 6.82  | 6.76  | 6.70  | 6.63  | 6.58  |
| Open-circuit voltage   | Voc              | ٧ | 42.1  | 41.9  | 41.7  | 41.6  | 41.4  |
| Short-circuit current  | Isc              | Α | 7.27  | 7.22  | 7.16  | 7.11  | 7.06  |

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

#### THERMAL CHARACTERISTICS

| Nominal operating cell temperature          | NOCT              | °C   | 46 +/- 2 |
|---|-------------------|------|----------|
| Temperature coefficient of P <sub>max</sub> | γ                 | %/°C | -0.42    |
| Temperature coefficient of V₀c              | β <sub>Voc</sub>  | %/°C | -0.32    |
| Temperature coefficient of Isc              | αlsc              | %/°C | 0.05     |
| Temperature coefficient of V <sub>mpp</sub> | β <sub>Утрр</sub> | %/°C | -0.42    |

## **OPERATING CONDITIONS**

| Max. system voltage                         | 1000Vpc                    |
|---|----------------------------|
| Max. series fuse rating                     | 15A                        |
| Limiting reverse current                    | 15A                        |
| Operating temperature range                 | -40 to 185°F (-40 to 85°C) |
| Max. hailstone impact (diameter / velocity) | 25mm / 23m/s               |

## **CONSTRUCTION MATERIALS**

| Front cover (material / thickness)                          | low-iron tempered glass / 4.0mm                      |  |
|---|--|--|
| Cell (quantity / material / dimensions / number of busbars) | 72 / multicrystalline silicon /<br>156mm x 156mm / 3 |  |
| Encapsulant (material)                                      | ethylene vinyl acetate (EVA)                         |  |
| Frame (material / color / edge sealing)                     | anodized aluminum alloy / silver / silicone or tape  |  |
| Junction box (ingress protection rating)                    | ≥IP65  |  |
| Cable (length / cross-sectional area)                       | 1200mm / 4mm²  |  |
| Connector (type / ingress protection rating)                | MC4 or Amphenol H4 / ≥ IP67                          |  |
|   |  |  |

The specifications in this datasheet are not guaranteed and are subject to change without prior notice. This datasheet complies with EN 50380:2003 requirements.

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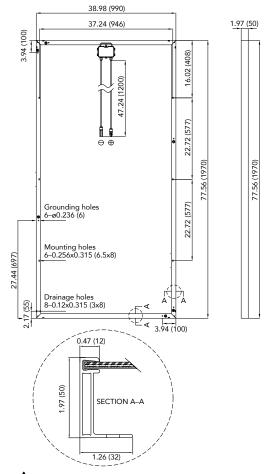
#### **GENERAL CHARACTERISTICS**

| Dimensions (L / W / H) | 77.56in (1970mm) / 38.98in (990mm) /<br>1.97in (50mm) |
|------------------------|---|
| Weight                 | 57.3lbs (26kg)  |

## PACKAGING SPECIFICATIONS

| Number of modules per pallet            | 21   |  |  |
|---|--|--|--|
| Number of pallets per 40' container     | 24   |  |  |
| Packaging box dimensions<br>(L / W / H) | 78in (2000mm) / 45in (1145mm) /<br>46in (1170mm) |  |  |
| Box weight                              | 1307lbs (593kg)                                  |  |  |

#### Units: inch (mm)



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





