

# YGE-U 1500 SERIES

YL320P-35b  
YL315P-35b  
YL310P-35b  
YL305P-35b  
YL300P-35b



## 1500 VOLT TECHNOLOGY FOR NEXT GENERATION SOLAR POWER PLANTS

With a 1500 volt maximum system voltage and a sturdy aluminum frame, the YGE-U 1500 Series reduces balance-of-system costs, increases system-level energy yield, and simplifies installation.

16.2%

MAXIMUM EFFICIENCY

25 YEAR

LINEAR POWER WARRANTY

0-3%

POWER TOLERANCE



### Balance-of-Systems Savings

More YGE-U 1500 Series modules can be installed per string, which reduces balance-of-system costs because fewer combiner boxes, fuses, and homerun cables are required.



### Increased Project Performance

Due to its increased maximum system voltage, the YGE-U 1500 Series enables increased system-level energy yield by reducing resistive losses.



### Potential Induced Degradation (PID) Resistance

YGE-U 1500 Series modules are engineered for PID-resistance per IEC 62804 standards.



### Simplified Installation

With a robust aluminum frame that features multiple mounting and grounding holes, the YGE-U 1500 Series is compatible with standard fixed tilt and tracking systems, simplifying installation.

### Warranty Information

Ten-year limited product warranty. Industry leading 25-year performance warranty adds value by guaranteeing power output on an annual basis, in compliance with our warranty terms and conditions.

### Performance Modeling

For those interested in obtaining panel performance modeling files for system energy yield simulation, please contact Yingli at [simulation@yingliamericas.com](mailto:simulation@yingliamericas.com).

### Qualifications & Certificates

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



# YGE-U 1500 SERIES

Powered by **YINGLI**

## ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)							
Panel type			YL320P-35b	YL315P-35b	YL310P-35b	YL305P-35b	YL300P-35b
Power output	$P_{max}$	W	320	315	310	305	300
Power output tolerances	$\Delta P_{max}$	%			0 / +3		
Panel efficiency	$\eta_m$	%	16.2	16.0	15.7	15.5	15.2
Voltage at $P_{max}$	$V_{mpp}$	V	37.0	36.8	36.3	36.1	35.8
Current at $P_{max}$	$I_{mpp}$	A	8.64	8.56	8.53	8.45	8.37
Open-circuit voltage	$V_{oc}$	V	46.0	45.7	45.6	45.4	45.2
Short-circuit current	$I_{sc}$	A	9.18	9.12	8.99	8.93	8.86

STC: 1000W/m<sup>2</sup> irradiance, 25°C cell temperature, AM 1.5G spectrum according to EN 60904-3. Average relative efficiency reduction of 3.3 % at 200W/m<sup>2</sup> according to EN60904-1.

Electrical parameters at Nominal Operating Cell Temperature (NOCT)							
Power output	$P_{max}$	W	233.4	229.8	226.1	222.5	218.8
Voltage at $P_{max}$	$V_{mpp}$	V	33.8	33.6	33.1	32.9	32.7
Current at $P_{max}$	$I_{mpp}$	A	6.91	6.85	6.82	6.76	6.70
Open-circuit voltage	$V_{oc}$	V	42.5	42.2	42.1	41.9	41.7
Short-circuit current	$I_{sc}$	A	7.42	7.37	7.27	7.22	7.16

NOCT: open-circuit panel operation temperature at 800W/m<sup>2</sup> irradiance, 20°C ambient temperature, 1m/s wind speed.

## THERMAL CHARACTERISTICS

Temperature coefficient of $P_{max}$	%/°C	-0.42
Temperature coefficient of $V_{oc}$	%/°C	-0.32
Temperature coefficient of $I_{sc}$	%/°C	0.05

## OPERATING CONDITIONS

Max. system voltage	1500V <sub>oc</sub>
Max. series fuse rating	15A
Limiting reverse current	15A
Operating temperature range	-40°F to 185°F (-40°C 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 / 156mm x 156mm / 4
Encapsulant (material)	ethylene vinyl acetate (EVA)
Backsheet (material)	fluoropolymer-based with EVA primer
Frame (material / color)	anodized aluminum / silver
Junction box (ingress protection rating)	≥ IP65
Cable (length / cross-sectional area)	1100mm / 4mm <sup>2</sup>
Connector (type / ingress protection rating)	MC4 / IP67 or Amphenol H4 / IP68

## GENERAL CHARACTERISTICS

Panel dimensions (L / W / H)	77.6in (1970mm) / 39.4in (1000mm) / 1.57in (40mm)
Panel weight	57.3lbs (26kg)
Number of panels per pallet	26
Number of pallets per 40' container	24
Packaging box dimensions (L / W / H)	78.7in (2005mm) / 45in (1145mm) / 46.5in (1180mm)
Packaging box weight	1587.3lbs (720kg)

**Yingli Green Energy Americas, Inc.**

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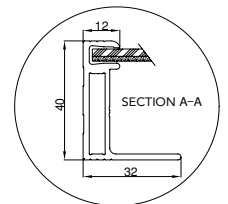
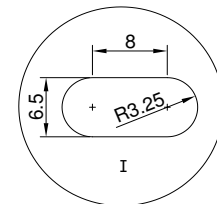
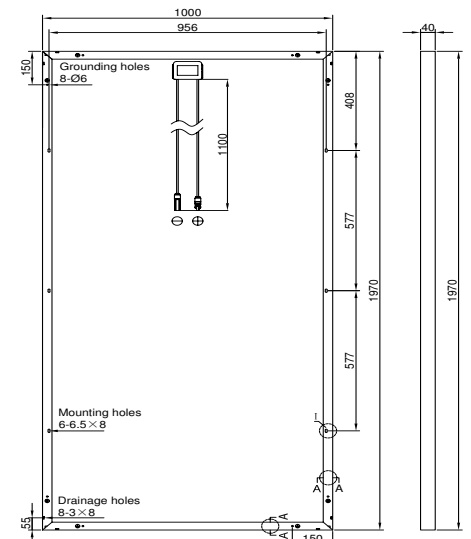
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Unit: mm



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

