

# YGE 240 SERIES

YL240P-29b **NEW!**

YL235P-29b

YL230P-29b

YL225P-29b



## COMPANY

Yingli Green Energy (NYSE:YGE) is one of the world's largest fully vertically integrated PV manufacturers. With over 2 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 and the first Chinese company to sponsor 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 14.7%, reducing installation costs and maximizing the kWh output per unit area.
- Power tolerance of +/-3% minimizes PV system mismatch losses.

## 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 a stable mechanical life.
- Manufacturing facility certified to ISO9001 Quality Management System standards.
- Module packaging optimized to protect product during transportation and minimize on-site waste.

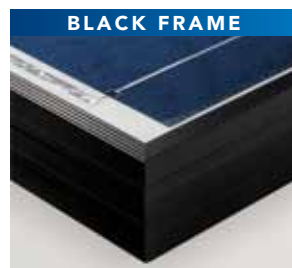
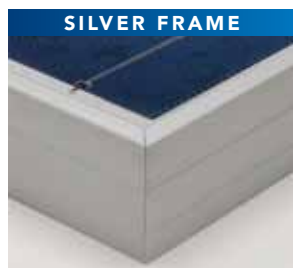
## WARRANTIES

- Extensive 5-year limited product warranty and a 25-year limited power warranty.
- Limited power warranty\* = 90% of the minimum rated power output for 10 years, 80% of the minimum rated power output for 25 years.

\*In compliance with our warranty terms and conditions.

## QUALIFICATIONS & CERTIFICATES

UL 1703 and ULC 1703, UL Fire Safety Class C, CEC, FSEC, ISO 9001:2008, ISO 14001:2004, BS OSHAS 18001:2007, SA8000



# YGE 240 SERIES

## ELECTRICAL PERFORMANCE

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

Module name			YGE 240	YGE 235	YGE 230	YGE 225
Module type			YL240P-29b	YL235P-29b	YL230P-29b	YL225P-23b
Power output	$P_{max}$	W	240	235	230	225
Power output tolerances	$\Delta P_{max}$	%	+/- 3			
Module efficiency	$\eta_m$	%	14.7	14.4	14.1	13.8
Voltage at Pmax	$V_{mpp}$	V	29.5	29.5	29.5	29.5
Current at Pmax	$I_{mpp}$	A	8.14	7.97	7.80	7.63
Open-circuit voltage	$V_{oc}$	V	37.5	37.0	37.0	36.5
Short-circuit current	$I_{sc}$	A	8.65	8.54	8.40	8.28

STC: 1000W/m<sup>2</sup> irradiance, 25°C module temperature, AM1.5g spectrum according to EN 60904-3

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

Power output	$P_{max}$	W	174.3	169.9	166.4	162.7
Voltage at Pmax	$V_{mpp}$	V	26.6	26.5	26.5	26.5
Current at Pmax	$I_{mpp}$	A	6.56	6.41	6.28	6.14
Open-circuit voltage	$V_{oc}$	V	34.2	33.8	33.8	33.4
Short-circuit current	$I_{sc}$	A	7.01	6.92	6.80	6.71

NOCT: open-circuit operating cell temperature at 800W/m<sup>2</sup> 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	-0.37
Temperature coefficient of $I_{sc}$	$\alpha_{Isc}$	%/°C	0.06

## OPERATING CONDITIONS

Max. system voltage	600V <sub>oc</sub>
Max. series fuse rating	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
Cell (quantity/material/type/dimensions/area)	60 / polysilicon / multicrystalline / 156 mm x 156 mm / 243.3 cm <sup>2</sup>
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 / 47.24 in (1200 mm) / 12 AWG / 0.244 in (6.2 mm)
Plug connector (manufacturer/type/protection degree)	Amphenol / H4 / IP68

• The specifications in this datasheet are not guaranteed and are subject to change without prior notice.

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

YINGLISOLAR.COM | NYSE:YGE

© Yingli Green Energy Holding Co. Ltd. | YGE240Series\_EN\_201107\_v01

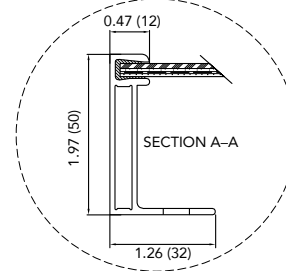
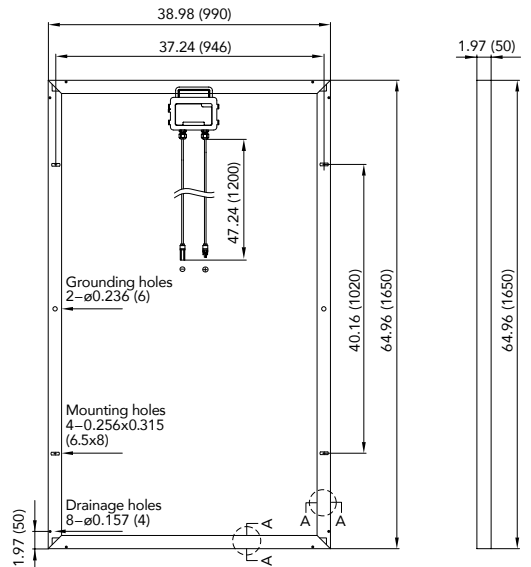
## GENERAL CHARACTERISTICS

Dimensions (L/W/H)	64.96 in (1650 mm) / 38.98 in (990 mm) / 1.97 in (50 mm)
Weight	43.7 lbs (19.8 kg)

## PACKAGING SPECIFICATIONS

Number of modules per pallet	20
Number of pallets per 53' container	36
Packaging box dimensions (L/W/H)	67 in (1710 mm) / 45 in (1150 mm) / 47 in (1190 mm)
Box weight	992 lbs (450 kg)

### Units: inch (mm)



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

