## YLM-VG 60 CELL



# **IMPROVED POWER NEVER SETTLE FOR LESS**

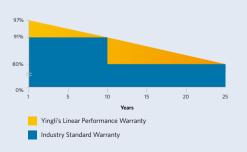
Choosing the best P-type monocrystalline cells, YLM-VG series modules are making the best out of your system. Trust in the expertise of Yingli and well proven technology.

19.7% CELL EFFICIENCY

10 YEAR PRODUCT WARRANTY

0-5W **POWER TOLERANCE** 

## 25 Years Linear Warranty



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High Power Density
High conversion efficiency and more power output per square meter.



Durable PV modules, independently tested for harsh environmental conditions such as exposure to salt mist, ammonia and known PID risk factors.



#### **Advanced Glass**

Our high-transmission glass features a unique anti-reflective coating that directs more light on the solar cells, resulting in a higher energy yield.



### **PID Resistant**

Tested in accordance to the standard IEC 62804, our PV modules have demonstrated resistance against PID (Potential Induced Degradation), which translates to security for your investment.

#### **Yingli Green Energy**

Yingli Green Energy Holding Company Limited (NYSE: YGE), known as "Yingli Solar", is one of the world's leading solar panel manufacturers with the mission to provide affordable green energy for all. Yingli Solar makes solar power possible for communities everywhere by using our global manufacturing and logistics expertise to address unique local challenges.

## YLM-VG 60 CELL

### **ELECTRICAL PERFORMANCE**

Electrical parameters at Standard Test Conditions (STC)							
Module type			YLxxxD-30b (xxx=P <sub>max</sub> )				
Power output	P <sub>max</sub>	W	290	295	300	305	310
Power output tolerances	ΔP <sub>max</sub>	W	0/+5				
Module efficiency	η"	%	17.8	18.1	18.3	18.7	19.1
Voltage at P <sub>max</sub>	V <sub>mpp</sub>	V	32.2	32.5	32.6	32.9	33.2
Current at P <sub>max</sub>	I <sub>mpp</sub>	Α	9.01	9.08	9.19	9.28	9.31
Open-circuit voltage	V <sub>oc</sub>	V	38.9	39.7	39.9	40.0	40.3
Short-circuit current	I <sub>sc</sub>	Α	9.66	9.68	9.77	9.85	9.88

STC: 1000W/m² irradiance, 25°C cell temperature, AM1.5g spectrum according to EN 60904-3. Average relative efficiency reduction of 3.0% at 200W/m² according to EN 60904-1.

Electrical parameters at Nominal Operating Cell Temperature (NOCT)								
Power output	wer output P <sub>max</sub> W 216 220 223 227 230							
Voltage at P <sub>max</sub>	V <sub>mpp</sub>	V	29.9	30.2	30.4	30.6	30.8	
Current at P <sub>max</sub>	I <sub>mpp</sub>	Α	7.23	7.28	7.35	7.42	7.47	
Open-circuit voltage	V <sub>oc</sub>	V	36.7	36.9	37.1	37.3	37.5	
Short-circuit current	l <sub>sc</sub>	Α	7.67	7.71	7.78	7.84	7.89	

 $NOCT: open-circuit\ module\ operation\ temperature\ at\ 800W/m^2\ irradiance,\ 20^{\circ}C\ ambient\ temperature,\ 1m/s\ wind\ speed.$ 

#### THERMAL CHARACTERISTICS

Nominal operating cell temperature	NOCT	°C	44 +/- 2
Temperature coefficient of P <sub>max</sub>	Υ	%/°C	-0.39
Temperature coefficient of V <sub>oc</sub>	$\beta_{\text{Voc}}$	%/°C	-0.29
Temperature coefficient of I <sub>sc</sub>	$\alpha_{_{lsc}}$	%/°C	0.05

#### **OPERATING CONDITIONS**

Max. system voltage	1000V / 1500V <sub>DC</sub>		
Max. series fuse rating	15A		
Limiting reverse current	15A		
Operating temperature range	-40°C to 85°C		
Max. static load, front (e.g., snow)	5400Pa		
Max. static load, back (e.g., wind)	2400Pa		
Max. hailstone impact (diameter / velocity)	25mm / 23m/s		
Module fire performance	Type 1 (U.S.) / Class C (Canada)		

### CONSTRUCTION MATERIALS

Front cover (material / thickness)	3.2mm, High transparency, anti-reflective coatings toughened glass		
Cell (quantity / material / dimensions / number of busbars)	60 / monocrystalline silicon / 156.75mm x 156.75mm / 4 or 5		
Frame (material )	Silver, anodized aluminum		
Junction box (protection degree)	Protection level IP 68		
Cable (length / cross-sectional area)	1000mm / 4mm²		
Plug connector (type)	MC4 compatible		

<sup>•</sup> Due to continuous innovation, research and product improvement, the specifications in this product information sheet are subject to change without prior notice. The specifications may deviate slightly and are not guaranteed.

#### **QUALIFICATIONS & CERTIFICATES**













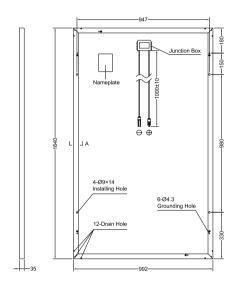
#### **GENERAL CHARACTERISTICS**

Dimensions (L / W / H)	1640mm/992mm/35mm		
Weight	18.6kg		

#### PACKAGING SPECIFICATIONS

Number of modules per pallet	30		
Number of pallets per 40' container	28		
Packaging box dimensions (L / W / H)	1680mm / 1130mm / 1123mm		
Box weight	598kg		

#### Unit: mm







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

Yingli Partners:			

### Yingli Green Energy Holding Co., Ltd.

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<sup>•</sup> The data do not refer to a single module and they are not part of the offer, they only serve for comparison to different module types.