

## EL-48/6P Series

EL-48/6P160 (160 Watt) EL-48/6P165 (165 Watt)  
 EL-48/6P170 (170 Watt) EL-48/6P175 (175 Watt)  
 EL-48/6P180 (180 Watt) EL-48/6P185 (185 Watt)



CE ISO9001 IEC

### Polycrystalline PV Modules

Everlight Polycrystalline photovoltaic panels offer industry leading performance in conversion efficiency and are designed specifically for our customers' residential, commercial and industrial needs.

Our Polycrystalline panels combine excellent solar power performance with great affordability. Our high power modules are designed and manufactured to the highest standards, are built to last and backed by our solid product warranty. These modules are designed for grid connected power plants up to 1000VDC and stand alone systems for battery charging or water

### KEY FEATURES

#### Superior Performance

- Made with highly efficient, reliable Polycrystalline solar cells to ensure output stability and industry leading power generation.
- Low voltage temperature coefficient delivers higher power output
- Advanced surface texturing increases light absorption
- Each model is equipped with by-pass diodes to ensure performance even if partially shaded

#### Durability

- High-quality tempered glass, EVA and backsheet provide insulation and protection against the elements
- Our patented frame features anti-corrosion treatment and solid aluminum construction

#### Flexibility

- Our modules are stored and transported using custom packaging to ensure safe delivery
- Innovative hexagonal drainage holes increase flexibility and ease installation no matter what the application

#### Reliability

- 25 year limited warranty on power output
- 7 year limited warranty on materials and workmanship
- Manufactured to the highest standards in our ISO 9001:2008 certified plant, Helios Photovoltaic Co. Ltd.
- Certified by ISO, CE and IEC

#### Headquarters-Hong Kong

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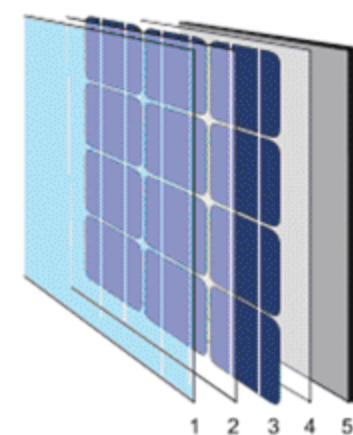
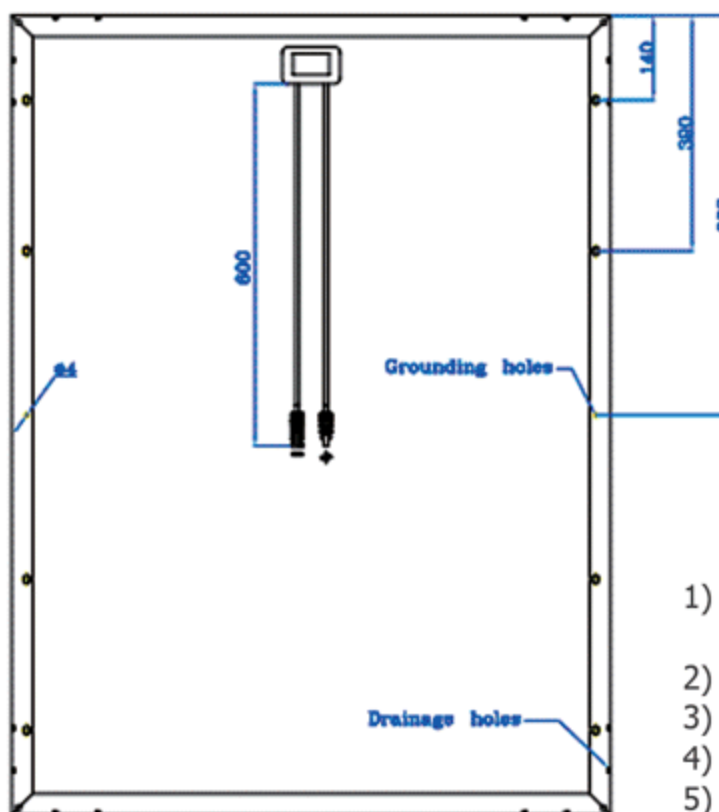
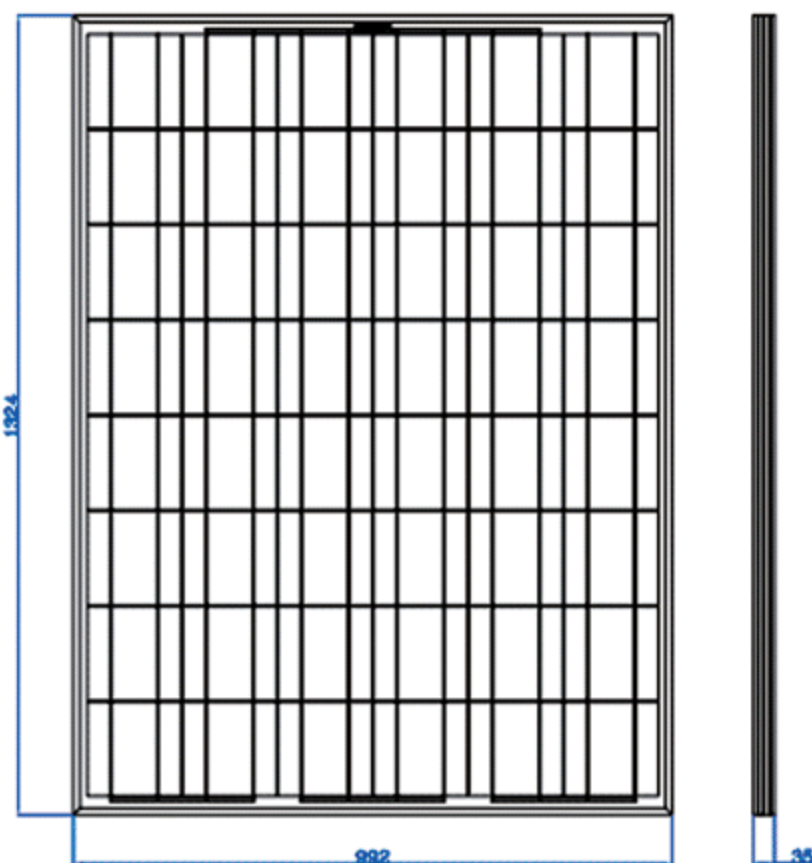
#### Manufactory-China

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 Tel: +86 519 8648 8901/2/3 Fax: +86 519 8648 2889  
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## EL-48/6P Series Technical Specifications

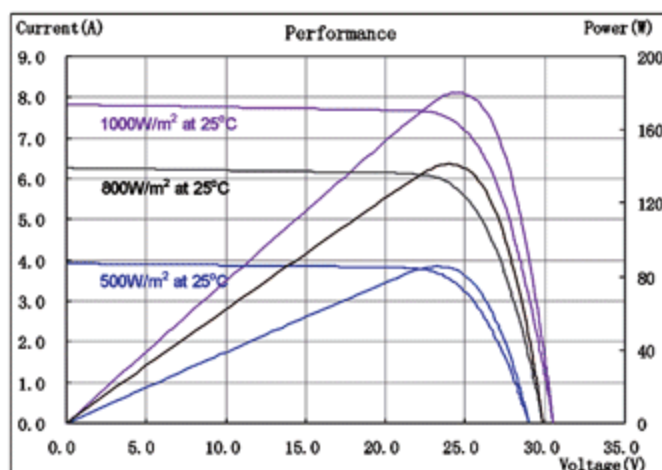
ELECTRICAL CHARACTERISTICS						
Model	EL-48/6P160	EL-48/6P165	EL-48/6P170	EL-48/6P175	EL-48/6P180	EL-48/6P185
Maximum power (Pmax)	160W	165W	170W	175W	180W	185W
Voltage at max. power (Vmp)	23.5V	23.6V	23.9V	24.2V	24.5V	24.7V
Current at max. power (Imp)	6.85A	6.98A	7.11A	7.22A	7.36A	7.47A
Open circuit voltage (Voc)	29.9V	30.1V	30.0V	30.1V	30.5V	30.4V
Short circuit current (Isc)	7.15A	7.31A	7.55A	7.74A	7.83A	8.11A
Temperature coefficient of Isc	(0.065 ± 0.015)%/°C					
Temperature coefficient of Voc	-(80 ± 10)mV/°C					
Temperature coefficient of power	-(0.45 ± 0.05)%/°C					
Operating temperature	-40/+85°C					
MECHANICAL CHARACTERISTICS						
Cell type	156 x 156 polycrystalline solar cell					
Cell array	48 pieces in a 8 x 6 matrix connected in series					
Dimensions (mm)	1324 x 992 X 35					
Weight (kg)	15.6					
Frame	Clear anodized aluminum alloy type universal frame; silver color					
Construction	Front: High-transmission 3.2mm tempered glass Back: Polyester Encapsulant: EVA					

### Module Diagram

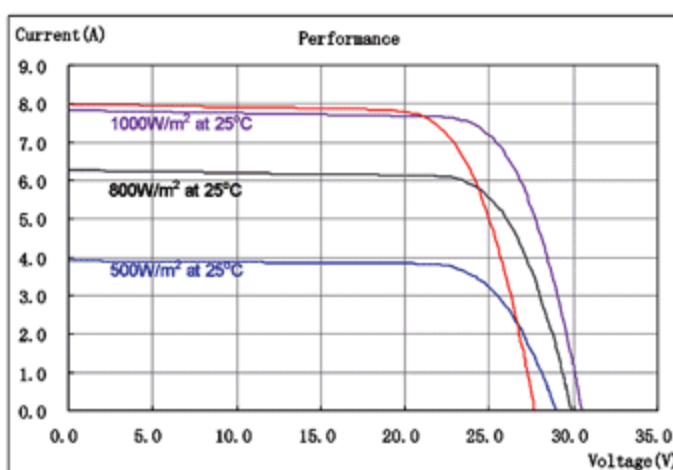


- 1) Solar glass – Low iron tempered glass of high transparency
- 2) EVA – Ethylene Vinyl Acetate sheet
- 3) Solar Cells – 156mm x 156mm
- 4) EVA – Ethylene Vinyl Acetate sheet
- 5) Back sheet – Triple layered back sheet

### Electrical Performance



### Power Output



### TEMPERATURE COEFFICIENTS

$I_{sc} = +0.065 \text{ } \%/^{\circ}\text{C}$   
 $V_{oc} = -0.436 \text{ } \%/^{\circ}\text{C}$   
 $P_{max} = +0.488 \text{ } \%/^{\circ}\text{C}$

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